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Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

[Removed from "Imperial College of Tropical Agriculture" file]

THE IMPERIAL COLLEGE OF TROPICAL AGRICULTURE
(INCORPORATED BY ROYAL CHARTER)

PRINCIPAL
O. T. FAULKNER, C. M. G.

CABLES: "STOMATA," PORT-OF-SPAIN,
CODES: BENTLEY'S AND A. B. C. 5TH EDN.



TRINIDAD, B.W.I.

In reply please refer to No. 1433

4th December 1940.

Dr. W. Popenoe,
Antigua,
Guatemala.

Dear Dr. Popenoe,

Thank you for your letter of 17 November and enclosed drawings, which I hope you did not want returned as I have impounded them for our museum.

You set me a difficult problem, but I have a fair amount of confidence in one point. The specimen which you say was taken from a wild tree in the forest a few weeks ago has almost undoubtedly affinities with what we call "Nicaraguan Criollo". These show in the warty "alligator" surface of the pod, but more particularly in the very characteristic 5-sided point, and also in the shape of the seed.

Now so far as I can make out, "Nicaraguan Criollo" is itself a complex assemblage, probably derived from a mixture of Theobroma pentagona with something else. It is Th. pentagona that contributes the point and the seed shape. Your plant, having deep violet cotyledons, must have had another parent as well, since the true "Nicaraguan Criollo" is white-seeded.

The other parent may well have been something like your other specimen, from the Station grounds, but this is a greater puzzle. The general pod type is, of course, what people call "Amelonado" but as you know this name means nothing, as it is applied equally to Brazilian Th. leiocarpa, Ecuadorian Cacao Nacional, and the smooth-podded elements in the Trinitario mixture. Your pod is very much like Th. leiocarpa, which we have hitherto considered as probably wild only in the Guianas. If, as you think, this cacao is truly wild, it is interesting whatever its botanical affinities, because according to Pittier's hypothesis as I understand it, violet-seeded cacaos should not occur west of the Isthmus of Panama. Pittier's theory, however, is clearly too simple, useful as it has been in calling attention to the complexity of cacao in general. If there is an indigenous violet-seeded Theobroma as far north as Honduras, the mapping of parent species is going to be more difficult than ever!

I am assuming that both your pods are yellow, but you omitted to mention pod colour and if either is red that would also be an interesting and unexpected character.

Do, please, continue your observations on cacao wherever you come across it, because collecting bits and pieces of the jig-saw is the only way we shall ever get a picture.

With kindest regards,

Yours sincerely,

E. E. Cushman.

Finca Los Tarrales

Patulul, Guatemala

Dicember 6, 1960.

Dr. Wilson Popeno.

Antigua, Guatemala.

Dear Dr. Popeno:

As agreed upon in our interview with you yesterday, concerning my son Theodore Engelhardt, and his wish to enter Zamorano as an Agricultural student I have the pleasure to enclose his final examination marks which he took in the English American School, last October.

As I mentioned in our conversation his marks are not high but it was a class of 42 students, of which he was the youngest. I sincerely hope that these marks will be high enough for him to take the required entry examination.

I wish to thank you for your interest in our boy and sincerely appreciate what you are doing for us.

I remain yours sincerely.

Lila Engelhardt

Lila Engelhardt.

Charles Theodore Engelhardt Guthrie.

Born in Tiquisate on the 29 of March 1944 Guatemala.

Nationality Guatemalteco.

Father Mr Theodore Engelhardt Fisher,
Nationality German.

Trade Ingeniero Agronomo.

Occupation General Manager on Finca Los Tarrales Patulul Owner Mr Joseph
D. Burge.

Mother Mrs Lila Engelhardt (nee Guthrie)

Nationality British Subject.

Occupation School Teacher.

Theodore Engelhardt studied his primary school at Lehnsen School in
Gatemala City.

In 1954 he entered the English American School and studied Bachillerato
and High School until October 1960 when he graduated as Bachiller en
Ciencias y Letras.

He now wishes to Study Agronomy and wishes if possible to Enter Zamorano
in Tegucigalpa Honduras.

ENGLISH-AMERICAN SCHOOL
GUATEMALA, C. A.

La Infrascrita Secretaria del ENGLISH-AMERICAN SCHOOL
CERTIFICA: Haber tenido a la vista los cuadros de exámenes
finales correspondientes al SEGUNDO AÑO VOCACIONAL BACHI-
LLERATO, en los cuales consta que: TEODORO ENGELHARDT, cur-
só las siguientes materias:

LITERATURA UNIVERSAL	42
ESTUDIOS SOCIALES	53
PROBLEMAS FILOSOFICOS	61
MATEMATICAS	51
CIENCIAS FISICOQUIMICAS	55
IDIOMA EXTRANJERO	58
PROBLEMAS PSICOLOGICOS	70
EDUCACION FISICA	81
CANTO Y MUSICA	83
ARTES PLASTICAS	77

A solicitud del interesado y para los usos legales que
le convengan, extendiendo la presente certificación, en la ciu-
dad de Guatemala, a los siete días del mes de Diciembre de
mil novecientos sesenta.-

r) *Lilia Talladere*
Secretaria





EMBAJADA DE PANAMA
TEGUCIGALPA, D. C.

Julio 18, 1957.

Sr. Doctor Wilson Popenoe
21 Avenida Roosevelt,
San Salvador,
El Salvador.

Estimado Doctor:

Me refiero a su atenta de 14 de los corrientes.

No le comuniqué directamente el otorgamiento de la Orden de Balboa a Ud. y la Señora de Stone, por ignorar su dirección, por éso me valí de la mediación de nuestro amigo el Sr. Virgil Scott.

Aún no he recibido las joyas y los diplomas de esta Condecoración para Uds. Cuando lleguen a mis manos tendré el placer de comunicarme con Ud. de nuevo, para acordar día, lugar y hora de la entrega.

De Ud. atentamente,

Ernesto B. Fábrega
Embajador de Panamá.

P. S.-Estas condecoraciones las solicité yo al Gran Concejo de la Orden hace como año y medio, y hasta ahora han venido a resolver mi solicitud. Ud. sabe que las cosas de Palacio andan despacio.

EBF/mcg.

Antigua G. Marzo 25, 1961.

Señor Alcalde Municipal de
la Ciudad de Antigua Guatemala
Presente.=

Señor Alcalde :

Respetuosamente solicito de su despacho el permiso para
que la señora Helen de Popenoe sea enterrada en el mausoleo
de mi propiedad que consta de tres cajas, en una de ellas
esta enterrado el que en vida fuera mi esposo : Carlos
Dressler y las otras dos estan vacias, *pues en una de ellas
deseo sea enterrada la Sra. Popenoe previa consulta con el
que fue su esposo, Dr. Popenoe que se encuentra en este dia
en camino de Miami a Guatemala.

Doy a Uds. las gracias por la pronta atencion que se sirva
prestar a ri solicitud y me suscribo como su Atta. S.S.

Josefina Jonama v. de Fernandez
Josefina vda. de Fernandez

P.D. El Custodio del Cementerio sabe ya donde esta localizad
este mausoleo.



SERVICIO DE EXTENSION AGRICOLA

AGENCIA NUM. 45
LOCALIDAD GUIMAR.
PROVINCIA TENERIFE.

ASUNTO

Sr. Dr. Don

Wilson Popenoe.

Antigua (Guatemala).

Muy señor nuestro: Desde este apartado rincón español y tras de serias indagaciones para lograr su dirección, nos dirigimos a Vd. aprovechando la gentileza de nuestro maestro de Extensión Agrícola Don Emilio Tejada.

Al crearse en Canarias la primera Agencia Comarcal de Extensión Agrícola, nos hemos encontrado con problemas totalmente desconocidos para nosotros ya que no conocemos apenas los cultivos de tipo tropical y menos aun los frutales.

Por esto mismo nos dirigimos a Vd. como la única persona capaz de iluminar nuestros conocimientos sobre la fruticultura tropical, en la seguridad de que esa su bondad que le ha hecho famoso entre los agricultores españoles, una vez más hará su aparición para dar rápida y exacta solución a los problemas.

Aunque todos los frutales tropicales cultivados en Canarias, nos preocupan, sin embargo destaca sobre todos el aguacate. - Hasta tal punto que hemos decidido escribirle con las siguientes consultas.

1º). ¿Donde podríamos adquirir algun libro que trate sobre los frutales tropicales (aguacate, guayaba, mango, chirimoyo, piña americana, papaya).

2º). ¿Tiene Vd. alguna obra escrita sobre ese tema? - ¿donde podríamos adquirirla?.

3º). ¿Donde podríamos adquirir algun libro que trate de las enfermedades y plagas de los frutales tropicales citados?.

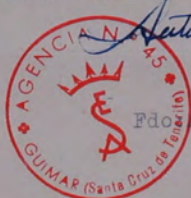
4º). ¿Tiene Vd. alguna obra escrita sobre ese tema? - ¿donde podríamos adquirirla?

5º). ¿Existe alguna casa comercial que se dedique a la venta de injertos de frutales tropicales?.

6º). ¿Donde podríamos adquirir información sobre el injerto de estos arboles frutales.

Perdone el atrevimiento de dirigirnos a Vd. con tan gran numero de consultas, las cuales vienen provocadas por este deseo propio de cumplir el cometido de Extensión Agrícola y colaborar a elevar el nivel de vida y cultural de nuestros agricultores.

Sumamente agradecidos y pidiendole perdon por tantas molestias esperamos con ansiedad su contestación y quedamos a su absoluta disposición: muy atte. s.s.



Antonio Fernandez Cuevas.

9 de Enero de 1.958.

Estimado doctor Popenoe:

Le deseo un perfecto estado de salud en compañía de doña Elena. Nosotros estamos todos muy bien.

Ya estamos todos en Granada al lado de nuestras familias y aun hay veces que al levantarnos creemos que vamos a despertar de un sueño y que nada es cierto.

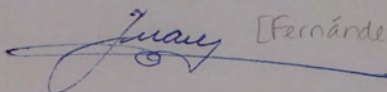
Los arbolitos de mango tuve la suerte de pasarlos en el aeropuerto y cuando llegué a Granada puse un telegrama al Sr. Sarasola y él envió a un señor a mi casa a recogerlos. Yo creo que ya estarán sembrados.

Ahora quiero avisarle a Vd. de una cosa: cuando llegué a Lisboa tuve necesidad de cambiar algunos dólares y me dieron el cambio a razón de 56'15 pesetas por cada dólar. Le digo esto por si le interesara cambiar en Lisboa algun dinero.

Hemos hecho un viaje muy cómodo y tranquilo. Los niños no se han mareado una sola vez y durante casi todo el trayecto vinieron caminando por el avión. Estamos muy contentos.

Si necesita Vd. alguna cosa de acá, ya sabe Vd. que nada mas que decírmelo.

Esperando sus noticias le saluda cariñosamente:

 [Fernández]

S/C. Juan Fernandez Roman. Careillo San Agustin 59 - C. Granada. España.

Royal Botanic Garden,
Edinburgh, 4,
Scotland.

10th September, 1957.

Dear Mr. Popenoe,

I am sending to you a copy of the redraft of the International Code of Nomenclature for Cultivated Plants which has been drawn up as a result of decisions taken in Utrecht (21st-23rd November, 1956) at the Inaugural Meeting of the International Commission for the Nomenclature of Cultivated Plants of the International Union of Biological Sciences. The redraft is the work of the Editorial Committee appointed at Utrecht and consisting of

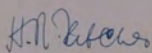
Dr. G. Nilsson-Leissner representing Agriculture
Dr. E. L. Little, Jr., representing Forestry
Dr. G. H. M. Lawrence representing Horticulture
Dr. R. de Vilmorin as Chairman
Mr. J. S. L. Gilmour as Rapporteur
Dr. H. R. Fletcher as Secretary

The redraft already has been circulated to all members of the International Commission and some members of the Commission have made certain comments on the redraft. These comments are also being sent to you with the copy of the redraft.

The Commission is scheduled to meet in London on December 4th-6th 1957 to finalise the redraft of the Code in order that a new revised Code, meeting the requirements of agriculture, forestry and horticulture, and after publication in an issue of *Regnum Vegetabile*, may be submitted for approval at the XVth International Horticultural Congress in Nice in April, 1958, to F.A.O. and to the International Union of Forest Research Organisations.

Before the London Meeting of the Commission, I should very much like to be able to distribute to all the Commission Members not only the comments on the redrafted Code of Commission Members themselves but of members of the International Committee on Horticultural Nomenclature and Registration as well. Towards this end I would be grateful if you would carefully examine the redrafted Code together with those comments I am sending to you. If you should have any comments or criticisms to make, I trust you will let me have these by October 31st at the latest so that I might have them duplicated and distributed to all Commission members in time for the December meeting in London.

Yours sincerely,


(H. R. Fletcher)

Mr. Wilson Popenoe,
Guatemala.

SECTION A

General Considerations and Guiding Principles

1. Cultivated plants are essential to civilization. It is important, therefore, that a precise, stable, and internationally accepted system of nomenclature should be available for their naming.
2. The International Code of Botanical Nomenclature governs the use of scientific ("Latin") names for both cultivated and wild plants.
3. The aim of the present Code is to promote uniformity, accuracy and fixity in the naming of agricultural, horticultural and silvicultural varieties (cultivars) [see Section A.4 and Section B (3)] which are or have been in cultivation and which are normally given vernacular names (such as Apple 'Cox's Orange Pippin', Rhododendron 'King George', etc.).
4. The term variety (cultivar) in the sense used in agriculture, horticulture and forestry denotes an assemblage of cultivated individuals which has originated or is maintained in cultivation, which is intentionally maintained as uniform as possible, and which is distinguished by any characters (morphological, cytological, physiological, chemical, or others) that are significant for the purposes of agriculture, horticulture or forestry.
5. The common names of genera and species, such as beech for Fagus, potato for Solanum tuberosum, and hollyhock for Althaea rosea, are not regulated by this Code.

SECTION B

Categories and Their Designations

The three main categories or levels at which cultivated plants are named are genus, species and variety (cultivar).

- (1) The genus or hybrid genus i.e.
 - (a) Ordinary generic names, e.g. Brassica, Pinus, Rosa, Trifolium.
 - (b) Names applied to bigeneric hybrids, e.g. x Heucheralla, x Sorbopus.
 - (c) Names applied to multigeneric hybrids, e.g. x Potinara, x Sanderara.
 - (d) Names of graft-chimaeras (graft-hybrids) formed from members of different genera, e.g. + Crataegomispilus, + Laburnocytisus.
- (2) The species or interspecific hybrid assemblage, i.e. for a species the specific epithet⁽¹⁾; or, for an interspecific hybrid or graft-chimaera, a comparable epithet, a collective phrase, or a formula. For further particulars concerning hybrids see Chapter IV.
- (3) The variety (cultivar).
 - (a) The term "cultivar" (abbreviated as cv.)⁽²⁾ is an international word for the category known in different countries by different names, e.g. "variety" in English, "variété" in French, "variedad" in Spanish, "Sorte" in German, "sort" in the Scandinavian languages and in Russian, "ras" in Dutch, "razza" in Italian, etc. In each country agriculturists, horticulturists and foresters are free to use either the international term "cultivar" or the particular term applicable in their own language. It should be noted, however, that when the terms "variety", "variété" and their variants are used in the sense of "cultivar" it is important to avoid confusion with the botanical term "varietas" (also called "variety",

"variété", and "variedad"), which refers to a botanical category intermediate in position between that of species and forma, included in the International Code of Botanical Nomenclature and not dealt with in the present Code.

EXAMPLE. In the name Sedum spectabile cv. Brilliant⁽³⁾ or, as it is preferably written Sedum spectabile 'Brilliant', the first word (Sedum) is on the generic level, being the name of the genus; the second word (spectabile) is on the specific level and is known technically as the specific epithet; the third word ('Brilliant') is called the variety (cultivar) name in this Code to distinguish it from the full name of the variety (cultivar) which is Sedum spectabile 'Brilliant'.

- Footnote (1) The specific name for a plant is its binominal, e.g. Lilium regale; whereas the specific epithet of this plant is regale.
- (2) For details of the formation and use of variety (cultivar) names see Section C.
- (3) The abbreviation cv. must be used before the variety (cultivar) name unless this name is enclosed by single quotation marks.

(b) Special kinds of varieties (cultivars).

A variety (cultivar) may consist of any one of the four following kinds of unit:

- (i) a single clone.⁽¹⁾ When a variety (cultivar) is a clone the term "clone" or abbreviation "cl." may be attached to its variety (cultivar) name.

EXAMPLE. Syringa vulgaris cl. 'Decaisne', Cynodon dactylon cl. 'Coastal'.

- (ii) a line⁽²⁾ highly selected to a standard type. When a variety (cultivar) is a line the term "line" or abbreviation "ln." may be attached to its variety (cultivar) name.

EXAMPLE. Petunia ln. 'Rosy Morn', Triticum aestivum ln. 'Marquis'.

- (iii) a hybrid-line⁽³⁾ When a variety (cultivar) is a hybrid-line, the term "hybrid-line" or abbreviation "hl." may be attached to its variety (cultivar) name or identity symbol or number.

EXAMPLE. Onion hl. 'Granex', derived from the crossing of Onion 'Excel' and Onion 'Texas Early Grano 951'; similarly, Maize 'United States Department of Agriculture, hybrid corn No. 13' which is a double cross involving four inbred lines (usually abbreviated to 'Hybrid corn U.S. - 13') can be listed in formal international literature as Zea mays hl. 'U.S. - 13'.

- (iv) an assemblage of individuals showing genetical differences which do not, however, warrant any of the constituent units being treated as distinct varieties (cultivars).

- Footnote (1) Uniform material derived from a single individual and propagated entirely by vegetative means, as by cuttings, divisions, grafts, etc.
- (2) A sexually reproducing population of uniform appearance, propagated entirely by means of seed or spores, its stability maintained by selection to a standard.
- (3) A uniform group, which is the F₁ generation, derived by repeated crossing (made to obtain heterosis or hybrid vigour) from a series of two or more constantly maintained breeding stocks, these being maintained either by continued inbreeding or as clones.

EXAMPLES. Cucurbita 'Blue Hubbard', a recognised variety (cultivar) known to vary markedly as to fruit size and shape, but these variations are not separated as distinct varieties (cultivars).
Medicago sativa 'Ranger', the breeder's seed of which is derived from intercrossing of four maintained clones.
Phlox drummondii 'Sternenzauber', a mixture of different colour forms, all designated by the same "starlike" shape of the corolla.

- (c) During the course of improvement work on a variety (cultivar), selections are often produced which show certain differences, (for example, physiological, such as differences in disease resistance) from the parent variety (cultivar). Such a selection is sometimes referred to as a "strain", "Stamm", or equivalent term. This practice of designating these as strains is not adopted in this Code. It is recommended that any such selection showing sufficient differences from the parent variety (cultivar) as to render it worthy of a name, is to be regarded as a distinct variety (cultivar); if desirable, such selections, and also bud-mutants (if e.g. the season of flowering or ripening of a certain fruit variety (cultivar) or the period of use of the latter has not been changed), may be given names which indicate their relationship with the parent variety (cultivar).

EXAMPLE (1). Cabbage 'Wisconsin All Seasons', highly resistant to the disease 'Yellows', is a selection from the non-resistant Cabbage 'All Seasons'. Excessively long names resulting from repeated re-selections, such as Onion 'Giant Yellow Zittau Nordre Munkegaard 1' and Barley 'Dr. Franks grannenabwerfende Imperialgerste' must be avoided (see Art. 1 (d)).

EXAMPLE (2). Apple 'Crimson Bramley' is a bud-mutant from Apple 'Bramley's Seedling'; Tulip 'Rose Copland' is a bud-mutant from Tulip 'William Copland'.

- (d) The variety (cultivar) name of a bud-mutant ('sport') should, when desirable, link the mutant with the parent variety (cultivar). This should, however, only be made if economically important characters have not been changed. (see Section B (3) (c) Example 2).
- (4) Supplementary categories may be inserted in large and complex genera or assemblages of varieties (cultivars).

- (a) A number of these are botanical categories and their use is covered by the International Code of Botanical Nomenclature. Some of them, such as subgenus, section or series, are subdivisions of genera and their names, for the sake of information, may be inserted in brackets immediately after the generic name but do not form part of the full name of the variety (cultivar).

EXAMPLE. Prunus (subgenus Cerasus) avium 'Erianne';
Primula (sect. Vernales) x pruhoniciana 'Purpurkissen';
Brassica (sect. Sinapis) 'Dutch Yellow'.

Other terms, such as subspecies, convarietas (convariety), varietas (botanical variety) and forma (form) denote subdivisions of a species. If it seems useful or necessary to indicate to which part of a polymorphous species a variety (cultivar) belongs, the designation of such a category is added after the specific epithet and then forms part of the full name of the variety (cultivar.)

EXAMPLES. Ranunculus acris subsp. friesianus 'Flemus';
Cucurbita pepo convar. citrullina 'Dahlemer Dauerkürbis';
Apium graveolens var. dulce 'Golden Selfblanching';
Fagus sylvatica f. atropunicea 'Riversii'.⁽¹⁾

- (b) Within a species, or interspecific hybrid, which includes a large number of varieties (cultivars), assemblages of similar varieties (cultivars) may receive distinguishing designations as Groups.

EXAMPLES. Tulipa x gesneriana (Darwin group) 'Bartigon';
Pisum (Wrinkle-seeded group) 'Laxton's Progress'; Beta
vulgaris (Sugar Beet group) 'Klein Wanzleben E'.

In certain crops, it may be necessary to employ a hierarchy of 'groups' at several different systematic levels. In such cases, the arrangement and naming of the 'groups' should be left to those concerned with the systematics of the particular crop.

Footnote (1) In this example, f. atropurpurea includes all specimens of purple-leaved Fagus sylvatica belonging to different clones, whereas the variety (cultivar) name applies merely to one particular clone of that botanical form.

SECTION C

Rules and Recommendations

CHAPTER I

Formation and Use of Variety (Cultivar) Names

Art. 1. Rules for naming new varieties (cultivars).

- (a) From 1 January, 1959 onwards, the variety (cultivar) name of a hitherto unnamed variety (cultivar) is to be a vernacular or 'fancy' name and markedly different from a botanical epithet of Latin form.

EXAMPLES. 'Pygmy', not 'Pygmaeus' nor pygmaeus; 'Prinz Handjery' not 'Handjeryi' nor handjeryi.

- (b) A variety (cultivar) name of Latin form, published before 1 January, 1959, must not be rejected because it is in Latin. Such a name shall be distinguished typographically from a botanical epithet and must begin with a capital letter.

EXAMPLES. Thuja orientalis 'Elegantissima', Hibiscus syriacus 'Totus Albus'.

- (c) Varieties (cultivars) given Latin names and published as botanical varieties in conformance with the International Code of Botanical Nomenclature shall not be accepted as variety (cultivar) names, and new names in proper form must be given.

EXAMPLE. (hypothetical). A variety (cultivar) which has been named Iris innominata var. lutescens could be renamed Iris innominata 'Yellow Gem' but not Iris innominata 'Lutescens'.

- (d) A name should consist of one or two words and must not consist of more than three words.
- (e) A name must be clearly distinctive, not vaguely descriptive, e.g. Rose 'Yellow Queen' or 'Yellow Queen' Rose not Rose 'Yellow' or 'Yellow' Rose; Endive 'White Curled' not Endive 'Curled'.
- (f) For varieties (cultivars) within the same genus or "hybrid genus" names likely to be confused with one another must not be used, e.g. 'Warner', 'Werner' and 'Warnaer'; 'Ellen' and 'Helen'; 'Alexandra' and 'Alexandria' (see Art. 1 (h) Example); 'Bismarck' (after the statesman) and 'Bismark' (after the New Zealand town); 'Darwin' and 'Charles Darwin', or a large number of names with the same initial word.

- (g) Excessively long words or phrases (see Section B (3) (c) Example⁽¹⁾) and those difficult to pronounce correctly must be avoided, e.g. 'Centenaire de Rozain-Bourcharlat', 'Diplomagartenbauinspektor', 'Eldwyth Cholmondeley'.
- (h) Within the same genus or "hybrid genus" the same variety (cultivar) name is not to be used for more than one variety (cultivar) without permission of the official registration authority, this permission being granted only when it can be proved that the variety (cultivar) to which this name was first given is no longer known to be in cultivation or already possesses a correct name and that no confusion will result. The name of an extinct variety (cultivar) historically important as an ancestor of existing varieties (cultivars) should never be used for another variety (cultivar). Variants of the same name which differ so slightly as to make confusion probable are to be regarded as identical.

EXAMPLE. The use of the name Narcissus pseudonarcissus 'Victoria' excludes 'Victoria' from use as a variety (cultivar) name for any other member of the genus Narcissus such as N. poeticus 'Victoria'. Variants of the same name, such as 'Beatrice' and 'Beatrix', 'Charmian' and 'Charmain', 'Ellen', 'Helen', 'Helene', 'Hélène', 'Werner', 'Warner' and 'Warnaer', 'Bismarck' (the German statesman) and 'Bismark' (even if used for a town in New Zealand), exclude one another.

- (i) Duplication of name among varieties (cultivars) of closely related groups, such as Azalea and Rhododendron, which although separated generically by some are placed by others in the one genus, Rhododendron, must be avoided.

EXAMPLE. When Azalea 'Harvest Moon' is transferred to the genus Rhododendron, the variety (cultivar) name 'Harvest Moon' cannot be retained for it because this name has already been used under Rhododendron for another variety (cultivar).

Art. 2. Rules of Typography and Spelling.

- (a) The variety (cultivar) name shall be distinguished typographically from a Latin botanical epithet by enclosing in single quotation marks or by placing the scientific name in italics; or the abbreviation cv. may be placed before the variety (cultivar) name. The use of single quotation marks and initial capital to distinguish such variety (cultivar) names is of particular advantage when only one kind of printing type can be employed and when differentiating in a common list (in, for example, seedsmen's or nurserymen's catalogues) botanical varieties and varieties (cultivars) which still retain variety (cultivar) names of Latin form, e.g. Paeonia lactiflora var. trichocarpa which is a botanical variety, and Paeonia lactiflora 'Festive', which is a horticultural variety (cultivar) or Paeonia x festiva 'Mutabilis' and Paeonia 'Festiva Maxima', or Hemerocallis fulva var. disticha and Hemerocallis 'Alba Striata'.
- (b) Double quotation marks, which are used in botanical literature to indicate misapplied names or variant spellings, are to be avoided for variety (cultivar) names.

Art. 3. Names to be avoided. The following must be avoided when naming a new variety (cultivar), primarily to prevent confusion:

- (a) The scientific or vernacular names of a genus, names such as Carnation 'Pelargonium', Rosa 'Camellia' and Plum 'Apricot', must not be used since they may be carelessly referred to as pelargonium carnation, camellia rose and apricot plum.

*Dianthus caryophyllus, carnation, oeillet, Nelke.

/ Prunus domestica, plum, prunier, Pflaume.

- (b) The vernacular names of a species must not be used, e.g. Hyacinth 'Bluebell' or 'Bluebell' Hyacinth, Plum 'Apricot' or 'Apricot' Plum.
- (c) The scientific or vernacular name of the genus or species to which a variety (cultivar) belongs must not form part of the variety (cultivar) name but should be mentioned in the ways indicated in Section B.
- (d) Names of countries and states without an accompanying word must not be used; thus a crate of apples labelled 'Oregon' might be thought to be in transit to or from the State of Oregon, whereas a name such as 'Oregon Wonder' would obviate confusion.
- (e) The name of an originator or introducer of a variety (cultivar) must not be used as a name for that variety without an accompanying word as a variety (cultivar) name.
- (f) Numerals either alone or attached to a word, except as custom in certain groups dictates otherwise, must be avoided; in general, numerals are to be regarded as useful temporary designations while varieties (cultivars) are under trial. A variety (cultivar) name must not be substituted for such a designation without the permission of the originator or introducer.

EXAMPLE. Pea 'Mansholt 710/41', named Pea 'Emigrant' when put in commerce.

- (g) Names of politically conspicuous persons when such variety (cultivar) names would be particularly subject to replacement by commercial synonyms, must not be used.
- (h) Names which palpably exaggerate the merits of a variety (cultivar) or which may become inaccurate through the introduction of new varieties (cultivars) must not be used, e.g. superlatives relating to a particular quality ('Earliest of All', 'Superlative Protecting', 'Longest Possible' etc.).
- (i) Single letters as the first part of a variety (cultivar) name are not allowed; thus 'George Creelman' would be legitimate, but not 'G. Creelman'.
- (j) Unless required by linguistic custom, the articles 'a' and 'the' and their equivalents in other languages, are not allowed; thus 'Colonel' would be legitimate, not 'The Colonel', but 'La Rochelle' not 'Rochelle'.
- (k) Abbreviations for personal and geographical names must not be used; thus 'William Thomas' and 'Mount Kisco' would be legitimate, but not 'Wm. Thomas' and 'Mt. Kisco'.
- (l) Excessively long words or phrases (see Section B (3) (c) Example 1) and those difficult to pronounce correctly must be avoided, e.g. 'Centenaire de Rozain-Bourcharlat', 'Diplomagartenbau-inspektor', 'Eldwyth Cholmondeley'.
- (m) When it is desirable to designate polyploid or other cytologically differentiated assemblages within a species, or to indicate the cytological condition of these, this should be done by an appropriate name or symbol.

EXAMPLE. Phlox drummondii 'Tetra Red', Salsify 'Mammoth' (4n).

Art. 4. Position of variety (cultivar) name

The variety (cultivar) name must be attached to either a scientific name or a common name of the plant concerned, provided the latter is unambiguous. When attached to a common name of the plant concerned, the variety (cultivar) name may either precede or follow the common name.

EXAMPLE. *Syringa vulgaris* 'Mont Blanc' or Lilac 'Mont Blanc' or 'Mont Blanc' Lilac (in French Lilas 'Mont Blanc'; in German Flieder 'Mont Blanc' or 'Mont Blanc' Flieder).

BUT NOT *Syringa* 'Virginal' or 'Virginal' *Syringa*, as *Syringa*, which is an English name of *Philadelphus*, is also the Latin name for lilac.

Art. 5. Transfer of variety (cultivar) name.

The variety (cultivar) name does not form a nomenclatural combination with the scientific name and must remain unchanged when the scientific name is changed or transferred (for example, by union or division of genera or by adoption of an earlier name), unless the same variety (cultivar) name is already in use in the new position.

EXAMPLE. The following names all refer to the same variety (cultivar):

Scilla hispanica 'Rose Queen', *S. campanulata* 'Rose Queen',
S. hispanica var. *campanulata* 'Rose Queen', *Hyacinthoides hispanica*
'Rose Queen', and *Endymion hispanicus* 'Rose Queen'.

Recommendation 1. Name of originator, introducer or describer.

The name of the originator or introducer may be cited in parenthesis after the variety (cultivar) name, if desired, for purposes of precise reference and in technical publications. If originator or introducer is not known, the name of describer and date of original publication may be cited. The name of originator or introducer and year of registration are especially important in re-use of an old variety (cultivar) name and should be recorded in the Register.

EXAMPLE. *Weigela* 'Avalanche' (Lemoine).

For purposes of this Code, the term originator is given to the person or agency that develops or produces the new variety (cultivar) and who may release it for distribution; the describer is the person or agency first validly publishing the new name and its accompanying description; and the introducer is the person or agency who first makes the new variety (cultivar) available to the public.

When a variety (cultivar) having a legitimate name in one country is later introduced into another country under a commercial synonym (see Art. 20), the person or agency first validly publishing the accepted commercial synonym is considered the introducer of the plant under that later name.

In some instances, as for some food plants, varieties (cultivars) offered for release by a public agency, such as an experimental station or institute, to many introducers, may have no one introducer.

CHAPTER II

Publication, Priority and Rejection of Variety (Cultivar) Names

Art. 6. Legitimate and correct names.

A legitimate name is a name in accordance with this Code. A variety (cultivar) name to be legitimate must be either validly published or officially registered. The correct name for a variety (cultivar) is the earliest legitimate name given by (or with the permission of) the originator or introducer except as provided otherwise by an official Registration Authority (see Arts. 15 and 17). Other names are synonyms. An illegitimate name is one not in accordance with this Code.

Art. 7. Valid publication is effected by the sale or distribution to the public of printed or similar mechanically duplicated matter, containing both the name and description or definition of the variety (cultivar) or the name and a reference to a previously published description or definition, or by recognition by an official Registration Authority (see Art. 13). Printed or similar mechanically duplicated matter is defined as publications or reading matter multiplied by mechanical process whereby a number of identical, legible, indelible copies are made from the same inked surface.

EXAMPLES. Plant science periodicals (agricultural, botanical, horticultural, silvicultural, etc.), monographs, handbooks, other standard works, lists of registered names, botanic garden seed lists, and dealers' and tradesmen's catalogues.

The following are excluded: handwritten material, even though reproduced mechanically, and newspapers.

Art. 8. Dating of Publication

From 1 January, 1959 the publication must be clearly dated, at least as to year of publication, and copies should be deposited in libraries and in offices of the Registration Authorities concerned. See Appendix II.

Art. 9. Languages

Any language can be used for the valid publication of a new name but it is strongly urged that one of the following be used - English, French, German.

Art. 10. Description

The Registration Authority shall have power to require as a condition of registration that a short description of the variety (cultivar) be submitted in one of the three languages, English, French or German.

Recommendation 2. In the absence of an internationally recognised Registration Authority, it is recommended that valid publication of every new name be accompanied by a short description of the variety (cultivar) concerned.

Art. 11. Content of Description.

After 1 January, 1959 the description or definition must contain sufficient particulars to establish the identity of the new variety (cultivar) and to distinguish it from related varieties (cultivars) mentioned by name. The name of originator or introducer must be stated. Parentage and history must be included so far as known.

Recommendation 3. Specimen.

It is often desirable that a dried, pressed botanical specimen of a new variety (cultivar) be deposited and preserved in the herbarium of an institution and be so designated and cited in the description. Fleshy parts, such as fruits, may be kept in a preservative fluid. A coloured illustration filed with the specimen is useful for recording colours. A specimen is of particular value as a permanent record of first-generation hybrids and other varieties (cultivars) that are likely to remain of interest or which may later be the subject of dispute. Preservation in herbaria of a specimen of every new variety (cultivar), (for example of chrysanthemum or cereals) is not envisaged.

Art. 12. Illustration.

Publication of the name and an illustration without description does not constitute valid publication (except as provided by Art. 7).

Recommendation 4. A published illustration (black and white or coloured) of the new variety (cultivar) is a useful part of the description but not required.

Art. 13. Registration

Official registration by an internationally recognised Registration Authority is accepted as equivalent to valid publication (Appendix I). Names registered by such Authorities are legitimate (see Art. 6).

Art. 14. Starting Points

- (a) A register published by an International Registration Authority (see Appendix I) or other internationally recognised list or publication enumerating the varieties (cultivars) of a genus or group and compiled in accordance with this Code may be chosen by international agreement as the starting point for nomenclature of that group.
- (b) When no International Registration Authority exists, a published list, monograph, or handbook may be adopted as the starting point for a particular genus or group, after consultation with appropriate societies or individuals concerned, as follows: in agriculture by The Food and Agricultural Organisation of the United Nations or delegated authority; in horticulture by the International Committee on Horticultural Nomenclature and Registration; and in forestry by the International Union of Forestry Research Organisations.
- (c) In the absence of such an approved list or other publication, nomenclature of varieties (cultivars) begins on 1 May 1753 (Linnaeus, *Species Plantarum* ed. 1).

Art. 15. Exceptions to Priority

A variety (cultivar) name established in general use is retained in exception to priority when revival of the earliest validly published variety (cultivar) name or restoration to a different variety (cultivar) of the same genus would lead to widespread confusion and inconvenience.

Art. 16. Synonymy of Rejected Names

A rejected name is to be recorded as a synonym in the official register of the genus or group or in some other appropriate manner.

Art. 17. Choice of Variety (Cultivar) Names

When two or more varieties (cultivars) belonging to the same genus or species are widely grown under the same variety (cultivar) name, the official International Registration Authority may decide for which the name shall be retained.

Art. 18. Errors in Naming

A variety (cultivar) name is rejected as illegitimate if, owing to an error by the namer, it includes a word indicating that the plant belongs to an unrelated assemblage of varieties (cultivars).

EXAMPLE. The Cherry 'Kochs Verbesserte Ostheimer' is not in fact an Ostheimer and should therefore be known by the next oldest name 'Fodbielske'.

CHAPTER III

Translations, Transliterations and Commercial Synonyms

Art. 19. Translations and Transliterations

When a variety (cultivar) is introduced from one country to another, its original validly published variety (cultivar) name is normally to be retained. However, because of linguistic and other difficulties, transliteration, translation or changing of the name may sometimes be allowed. Personal names are not to be translated. A translation or

transliteration is regarded as the same name in a different form and not as a synonym. The first validly published transliteration or translation becomes the correct name in a particular language. In cases where a transliteration or translation has been made subsequent to the publication of the original name, priority for the name should date from the original publication and not from the later transliteration or translation.

EXAMPLE 1. Cucumber* 'Noa's Forcing' is a translation of Gurke 'Noas Treib'; Savoy Cabbage 'Eisenkopf' is translated into English as 'Ironhead', into French as 'Tête de Fer', into Swedish as 'Järnhuvud'.

EXAMPLE 2. The variety (cultivar) name Apple 'Charles Ross' should not be altered to 'Karl Ross', 'Karel Ross' or 'Carlo Ross'; 'San Pietro' should not be altered to 'Saint Peter', 'Sankt Peter' or 'Saint Pierre'.

EXAMPLE 3. The German translation Führer, or the Italian translation Duce of the French word Chef (or of the English word Leader) could cause difficulty in some countries; if such a translation is not acceptable it would be advisable to replace it by a commercial synonym. (See Art. 20).

EXAMPLE 4. The variety (cultivar) name 'Amanogawa' in the full name *Prunus serrulata* 'Amanogawa' is the correct and generally accepted transliteration from Japanese script; hence it is not legitimate now to introduce the translation 'Celestial River' (or 'Milky Way') as a variety (cultivar) name for this plant.

Art. 20. Commercial Synonyms

Changed names are to be known as commercial synonyms and may be used only after approval by the official Registration Authority of the group concerned after consultation with the raiser. Commercial synonyms, when used in catalogues and lists, should, where possible, be followed by an indication of the original name.

EXAMPLE. Pear 'Bartlett' (or 'Bartlett' Pear - see Art. 4) is a commercial synonym in North America of Pear 'Williams' Bon Chrétien; Rose 'Mevrouw van Straaten-van Nes' (see Art. 1 (d)) has a commercial synonym 'Van Nes' in Great Britain, 'Permanent Wave' in the United States.

CHAPTER IV

Names of Hybrids and Graft-Chimaeras

Art. 21. Varieties (Cultivars) of Hybrid Origin

At the variety level, hybrids are named as varieties (cultivars) and may in the same way be treated as clones, lines, or hybrid-lines (Section B 3 (b)). Varieties (cultivars) of hybrids of the same parentage are grouped together and designated by a formula and, whenever it seems useful or necessary, by a collective name.

Art. 22. Formulae

The formula consists of the name of each parent separated by the multiplication sign.

EXAMPLE. *Rhododendron* 'Adonis' x 'Chanticleer'.

Recommendation 5. It is recommended that in the citation of the parentage formula, where the information is available, the female parent should be quoted first either with or without the sign ♀ (female). If, throughout a list of hybrids or "studbook", the parents are listed alphabetically, this should be clearly stated.

**Cucumis sativus*, cucumber, concombres, Gurke.

Art. 23. Collective Names

- (a) A collective name may be substituted for the formula whenever it seems useful or necessary. This may be either a word of Latin form preceded by the multiplication sign (X) or a phrase in common language preferably containing a word such as "hybrid" or "hybrids", "cross" or "crosses", "grex" or similar words in other languages which will make evident the collective nature of the unit. Collective names of hybrids in Latin form must be published with a description or diagnosis in Latin and are subject to the International Code of Botanical Nomenclature (Art. 40 and Appendix I Art. H 1-5). All plants derived from the two or more species represented by one formula have the same collective name including subsequent generations from the first cross, crosses within the generations, and back crosses with either parent, provided they are distinguishable from the parents. Within a major hybrid assemblage, subdivisions (groups) may be distinguished by a special designation (see Section B 4 (b)).

EXAMPLES. All hybrid varieties (cultivars), such as 'Donation' and 'Mary Christian', derived from interspecific crosses between Camellia japonica and Camellia saluenensis are included under the formula C. japonica x saluenensis and may be designated also by the collective name in Latin form Camellia x williamsii. The first mentioned hybrid variety (cultivar) may be listed as Camellia japonica x saluenensis 'Donation', Camellia x williamsii 'Donation', or merely Camellia 'Donation'.

Lilium 'Bellingham Hybrids' is a collective name in common language for interspecific hybrids between Lilium humboldtii and Lilium pardalinum, formula Lilium humboldtii x pardalinum. This collective name in common language is usually placed in parenthesis, as in the name Lilium (Bellingham Hybrid) 'Shuksan' for the clone 'Shuksan'.

Rosa (Hybrid Tea) 'Richmond' or Rose 'Richmond' or 'Richmond' Rose.

- (b) Parts of the Latin epithets of the parent species may be combined to form a collective name but not a variety (cultivar) name. Such a word should be avoided if there is any doubt about the identity and correct names of the parent species. If in Latin form the name is subject to the International Code of Botanical Nomenclature and must therefore be published with a description or diagnosis in Latin.

EXAMPLES. Lilium x sulphurgale is the collective name for hybrids of Lilium regale and L. sulphureum. Iris (Monspur grex) is the collective name for hybrids of Iris monnieri and I. spuria (see Art. 24).

- (c) The use of the name of only one parent species to designate a hybrid group is permissible only when the other parent is unknown or of complex, uncertain, or unknown parentage and when the hybrid group has well-marked characters undoubtedly derived from the one species indicated; for example, Rhododendron 'Fortunei Hybrids'.

Art. 24. (a) Grex

Variety (cultivar) names and similar names used in forming collective names in place of formulae, as in Orchid and Rhododendron hybrids, are to be followed by the word grex (plural grexes; Latin for swarm, flock, company, crowd, troop) or the abbreviation g.

EXAMPLES. The collective name Cattleya (Fabia grex) covers hybrids of Cattleya dowiana x labiata, of which Cattleya (Fabia g.) 'Prince of Wales' is a clone. Similarly, Cattleya (Princess Royal grex) covers Cattleya (Fabia grex) x C. x hardyana, of which Cattleya (Princess Royal g.) 'Fire Queen' is a clone.

- (b) In certain groups (e.g. Orchids and Rhododendrons) it has been the custom to use such names as *Rhododendron* 'Jalisco' var. 'Eclipse' when in fact 'Jalisco' stands for a collective name and 'Eclipse' for a variety (cultivar) name. This procedure is incorrect. The variety (cultivar) name used in a collective sense should be converted into a collective designation by adding a suitable word (see Art. 25).

EXAMPLES. The variety (cultivar) name such as *Rhododendron* 'Jalisco' var. 'Eclipse' is not legitimate, and should be amended to *Rhododendron* (Jalisco grex) 'Eclipse' or *Rhododendron* (Jalisco Hybrids) 'Eclipse'.

- (c) When the parentage of a flask or pan of hybrid seedlings is unknown, the collective name for this seedling assemblage should be accompanied by the abbreviation ign. (*ignotus*, Latin for unknown); for example, *Cymbidium* (Grosvenor grex) ign.

Art. 25. Short Names for Hybrid Varieties (Cultivars).

The variety (cultivar) name of a hybrid can be attached to the scientific name or common name of the plant group (Art. 4). This short name saves space and is also useful when the parentage is unknown, uncertain or complicated.

EXAMPLE. *Iris* 'Ambassadeur' or 'Ambassadeur' *Iris*.

Art. 26. Variety (Cultivar) Names of Interspecific Hybrids

After 1 January, 1959, when a collective name or formula is published for an interspecific hybrid, a variety (cultivar) name must be given to each particular form of the hybrid worth distinguishing, even if there exists only one such form. Otherwise, other forms of the same parentage, possibly inferior, may later be placed under the same collective name or formula without any variety (cultivar) name being available to distinguish the earliest and possibly superior form. If, however, the most meritorious forms selected from the progeny of the earliest cross are distinguished by variety (cultivar) names from the time of the first publication of the collective name of the hybrids, confusion with other forms, each of which should possess its own variety (cultivar) name, may be avoided. It is greatly to the advantage of the first producer to follow this procedure.

EXAMPLES. The name *Viburnum* x *bodnantense* covers all hybrids of *V. fragrans* x *V. grandiflorum*, though based on a selected form raised at Bodnant, which has been given the variety (cultivar) name 'Dawn' to distinguish it from other forms of the same parentage (*Bot. Mag.* 167: n. s. t. 113; 1950). Similarly, the name *Eucryphia* x *intermedia* covers all hybrids of *E. glutinosa* x *E. lucida*, but the name *Eucryphia* x *intermedia* 'Rostrevor' is to be used only for plants obtained through vegetative propagation from the particular hybrid seedling raised at Rostrevor to which the variety (cultivar) name 'Rostrevor' was given.

Art. 27. Graft-Chimaeras

Graft-chimaeras (sometimes called "graft-hybrids") are composed of tissues from two different plants, stock and scion, and are not true sexual hybrids. Graft-chimaeras are designated by a formula and, whenever it seems necessary or useful, by a name. In details not mentioned here, names of graft-chimaeras in Latin form should follow the International Code of Botanical Nomenclature and its rules for names of hybrids (Art. 40 and Appendix 1 Art. H 1-5).

- (a) The formula consists of the names of the two taxonomic groups (taxa) from which the tissues of the chimaera were derived, in alphabetical order and connected by the addition sign +.

EXAMPLES. *Cydonia oblonga* + *Pyrus communis*; *Cytisus purpureus* + *Laburnum anagyroides*; *Syringa* x *chinensis* + *S. vulgaris*.

- (b) When the components belong to different genera the name consists of a new "generic" name formed by a combination of the names of the component genera, preceded by the sign + and followed by an epithet. This "generic" name should not be the same as the "generic" name of hybrids between the same genera, nor should the epithet of a chimaera be the same as that used for a hybrid between the same species as the components of the chimaera.

EXAMPLES. + *Crataegomespilus dardarii* = *Crataegus monogyna* + *Mespilus germanica*, but x *Crataegomespilus gillottii* = *Crataegus monogyna* x *Mespilus germanica*; *Cytisus* + *adamii* = *Cytisus Laburnum* + *C. purpureus* or, if the components are considered generically distinct, + *Laburnocytisus adamii* = *Cytisus purpureus* + *Laburnum anagyroides*.

- (c) When the components belong to the same genus the name consists of the generic name followed by the sign + and an epithet.

EXAMPLE. *Syringa* + *correlata* = *Syringa* x *chinensis* + *S. vulgaris*.

- (d) The same two components may build a chimaera in more than one way, so that morphologically and histologically different forms may be distinguished. These forms should be united under the same formula or binary ('specific') name; when it is desirable to give them special designations they should be recognised as mixomorphs and designated by epithets in the same manner as forms of species or as varieties (cultivars) with names in the vernacular. This epithet preceded by the term 'mixomorph' (*mixomorpha*, abbreviated as *mx.*) is to be placed after the binary name.

EXAMPLES. + *Crataegomespilus dardarii* mx. 'Jules d'Asnières'; *Solanum* + *tubingense* mx. *koelreuterianum*.

CHAPTER V

Modification of the Code

Art. 28. This International Code of Nomenclature for Cultivated Plants can be modified only by the International Commission for the Nomenclature of Cultivated Plants of the International Union of Biological Sciences. All proposals for alterations or additions, whether from individuals or from national or international organisations, should be sent to the Secretary of the Commission (Dr. H. R. Fletcher, Royal Botanic Garden, Edinburgh).

Each edition of the Code is to be submitted by this Commission to the subsequent session of the International Horticultural Congress, to the Food and Agricultural Organisation and to the International Union of Forest Research Organisations for endorsement or for recommendation for future modification and improvement.

APPENDIX 1

REGISTRATION OF VARIETY (CULTIVAR) NAMES

General Principles

1. Registration is the compilation of lists of names and synonyms and the addition to them of new names, these being submitted to the Registration Authority by their proposers together with details of the origin and character of the plants concerned. The Registration Authority may legitimately require the proposer of a new name for a plant of which he is not the raiser or sole stockholder to give evidence that the permission of the raiser (which may be a person, company or institution) or sole stockholder has been obtained.

2. It is recommended that for each genus, or group of related genera, in which varieties (cultivars) are numerous, there should be a recognised International Registration Authority which should function according to the "Rules for the Guidance of Registration Authorities" listed below. In the case of horticultural crops, such Authorities are appointed by the International Horticultural Congress.
3. After 1 January, 1959, each new variety (cultivar) name to be registered with an International Registration Authority must be accompanied by an acceptable description or definition (see Art. 11). It is recommended that each International Registration Authority publish at intervals lists and supplements of names of new varieties (cultivars) registered after 1 January, 1959, together with date of registration, name of raiser or introducer, and description or definition or reference, if previously published.
4. It is recommended that where desirable the International Registration Authority be supplemented by the establishment in each interested country of a National Registration Centre for each genus or group of genera, through which the International Authority for the genus or genera should ordinarily act. Such National Registration Centres should carry out only provisional registration. By this means closer contact may be maintained with individual breeders and introducers, thereby leading to more efficient and complete registration.
5. It is recommended that when no International Registration Authority exists and when the existing registration of a group is purely national, this should be made international by agreement between National Registration Centre to co-operate as an International Registration Authority for this group, or when interest in a group centres in one country the National Registration Centre extending its activities to become the International Registration Authority.

Rules for the Guidance of Registration Authorities

The duties of Registration Authorities which are embodied in these rules were accepted by the XIVth International Horticultural Congress at Scheveningen in 1955.

- A. to compile, maintain and publish a list of names of varieties (cultivars) and subsequently to publish such supplements and new editions of the list as circumstances may require, making the fullest use of existing work;
 - (1) the lists of names should include the names of:
 - (a) all the varieties (cultivars) in cultivation; and
 - (b) all the varieties (cultivars) which, although no longer cultivated, are known to be of historical importance and therefore likely to occur in the future literature of the genus, e.g. varieties (cultivars) which have been important as the progenitors of existing varieties (cultivars).
 - (2) for each variety (cultivar), where possible, in addition to the correct name, the synonym or synonyms should be listed.
 - (3) each name should, as far as possible, be accompanied by sufficient particulars to establish the identity of the variety (cultivar). Where possible these particulars should include:
 - (a) the name of the originator and/or introducer;
 - (b) the name of the owner of the parental plant when the variety (cultivar) arose as a vegetative sport;
 - (c) the name of the stockholder who named the variety (cultivar);
 - (d) the year in which the name was given;
 - (e) the parentage of the variety (cultivar) when known;
 - (f) a note as to whether or not the variety (cultivar) had been tested;
 - (g) name and date of any awards given to the variety (cultivar);

- (h) particulars of the variety's (cultivar's) characteristics, e.g. classification, colour, chromosome data and/or the like.
(when colours are used reference to the Colour Chart used should, if possible, be given).
- B. to register names which conform to the rules and recommendations of the International Code for the Nomenclature of Cultivated Plants. A registration fee should be charged and should be fixed by the individual International Registration Authorities in consultation with the national organisations concerned in the various countries.
- C. to endeavour to get originators, introducers and others concerned with the distribution of plants to submit all new names to the Registration Authority and to use only names which conform to this Code.

APPENDIX 2

List of Suggested Libraries to receive Catalogues and Lists Containing New Names and/or Descriptions

- * Arcadia, Calif.
Los Angeles State and County Arboretum, 291 North Old Ranch Road.
- Auckland, New Zealand.
Auckland Institute and Museum, P.O. Box 27, Newmarket.
- Berlin, Germany.
Botanisches Museum, Königin Luise Strasse 6-C.
- * Boston, Mass.
Massachusetts Horticultural Soc., 300 Massachusetts Ave.
- * Brooklyn, N.Y.
Brooklyn Botanic Garden, 1000 Washington Ave.
- * Bruxelles, Belgium.
Jardin Botanique de l'Etat, 236 Rue Royale.
- Buenos Aires, Argentina.
Instituto de Botanica del M.A.G.N., Arroz 2875.
- Cambridge, England.
University Botanical Garden.
- Copenhagen, Denmark.
Horticultural Dept., Royal Veterinary and Agricultural College.
- East Lansing, Mich.
Michigan State University.
- Edinburgh, Scotland.
Royal Botanic Garden.
- * Genève, Switzerland.
Conservatoire et Jardin botaniques, 192 route de Lausanne.
- Göteborg, Sweden.
Göteborg Botaniska Trädgård, Frolundgat 22.
- * Ithaca, N.Y.
Bailey Hortorium, Cornell University.
- Jamaica Plain, Mass.
Arnold Arboretum.

- * Kew, Richmond, England.
Royal Botanic Gardens Library.
- Leiden, Netherlands.
Rijksherbarium, Nonnensteeg.
- * London, England.
Royal Horticultural Society, Vincent Square, Westminster.
- Los Angeles, Calif. (See also Arcadia).
Department of Horticulture, Univ. of California.
- Lund, Sweden.
Botanical Museum and Herbarium.
- Montreal, Que.
Jardin de Botanique, 4101 Sherbrooke St. E.
- München, Germany.
Botanischer Garten, Menzingerstrasse 67.
- * New York, N.Y.
New York Botanical Garden, Bronx Park.
- Oslo, Norway.
Botanisk Museum.
- Ottawa, Ontario.
Dominion Arboretum, Div. of Botany, Science Service.
- Paris, France.
Société Nationale d'Horticulture de France, 84 rue de Grenelle.
- Philadelphia, Penna.
Morris Arboretum, Chestnut Hill.
- Rochester, N.Y.
Highland Park Herbarium, Reservoir Ave.
- San Francisco, Calif.
California Horticultural Society, Golden Gate Park.
- Seattle, Wash.
Botanic Garden.
- St. Louis, Mo.
Missouri Botanical Garden, 2315 Tower Grove Ave.
- Stockholm, Sweden.
Hortus Botanicus Bergianus.
- Sydney, N.S.W., Australia.
National Herbarium of New South Wales, Botanic Gardens.
- Tokyo, Japan.
Botanic Gardens, Tokyo Univ., Bunkyo-ku.
- Tucuman, Argentina.
Instituto Miguel Lillo, Calle Miguel Lillo 205.
- Uppsala, Sweden.
Botaniska Trädgården.
- Wageningen, Netherlands.
Laboratory for Plant Taxonomy, 37 Rijksweg.
- * Washington, D.C.
U.S. Department of Agriculture Library.
U.S. National Arboretum.

* Institutions maintaining nursery catalogue collections.

COMMENTS BY DR. G. H. M. LAWRENCE ON DR. LITTLE'S ANALYSIS
OF THE REDRAFT OF THE INTERNATIONAL CODE OF NOMENCLATURE
FOR CULTIVATED PLANTS

To facilitate reference to Dr. Little's analysis I have numbered my paragraphs to agree with his.

The more I have studied this code in recent weeks, the more I have questioned the wisdom of accepting as valid publication the entry of a cultivar name in a register. As it now stands, a cultivar name dates, for purposes of priority, from the date the Registrar accepted it.

The situation here is not parallel with that in botanical nomenclature, for some Registrars receive several cultivar names in the one day's mail, and many cultivar names in the course of a week. This volume, and concomittant opportunity for duplication, does not exist (or rarely so) for species names of any genus of plants.

In my appended comments, I have suggested that publication of cultivar names should be (1) by individual's publication of the name, (2) by reference to a previous publication of the name (as when under the wrong genus), or (3) by publication by an official registration authority of a check list or other enumeration of names with dates of acceptance for registration given after each name in those groups or instances where that date is important for purposes of priority. If the date of acceptance for registration is not given, then the date of publication of the list is to be considered the date of publication of the name and its priority dates therefrom.

It seems to me that the phrase "... or other enumeration ..." allows the Registrar to publish new cultivar names at frequent intervals in a journal or as a Supplement to an existing checklist.

It is because I am disturbed at the carelessness and laxness with which many Registrars conduct their business that I feel the Commission might well reconsider this publication requirement. Too often registration is a shoe-box operation, where the records are on cards stored on some cupboard shelf, subject to loss of individual cards or of the lot (as by fire).

Dr. Little seems not to believe that the present draft does accept mere registration of a name as being the same as publication of that name. If he is confused (or if I am in error, and am confused) then should not consideration be given to making the final draft more clear and more positive in this regard? Surely most persons who will be using the Code will be less informed about it than are we of the Commission.

I know we are indebted to Dr. Little for the careful thought he put into his many suggestions. In fact, I am confident that he has done a more thorough job by having opportunity to study it privately, with as much time as was needed, than he could have done under the pressure of "getting on with it" at Cambridge last May. I have expressed some differences of opinion with him, and have tried to explain each instance. I am sorry if I have been unduly wordy in doing so.

A new subterfuge has just come to my attention and we should provide for it.

Some Registrars (American Iris Soc. for example) are accepting as cultivar names, romanized versions of Latin epithets. For example, *Iris pallida* cv. *Lutea* or cv. *Variegata*. The recommended use of single quotes is not followed. Furthermore, since they list only cultivar names and not the specific epithet concerned, they repeat the specific epithet in romanized form as the first of two words of the cultivar name, e.g. *Iris* cv. *Attica Lutea* for a cv. of *Iris attica*. Art. 1a of present draft covers this, of course, but it would help me to enforce it if the above could be an added example of how not to do it.

Another point: the Code forbids duplication of cultivar names in any genus. This means that many cvs. now having epithets in roman form will have to be renamed, e.g. Sedum has many species represented in part by variegated cvs., all but one of which must be renamed. This is going to be a real chore in some genera, of which Iris is one! Should the need for it be pointed out in the Code?

1. Dates and retroactivity. The proposed draft seems clear to me. It is my understanding that this Code becomes effective when on authorization of this Commission it is published. As in I.C.B.N., every Article is retroactive unless specified to the contrary.

2. Penalties. This question may be resolved by adding a new paragraph 3-bis to Section A of present draft to read.

"The provisions of this Code are to be followed by all who adopt it. Those of the headings "General Considerations" and "Categories and Designations" are included that users of the Code have and accept uniform definitions and concepts. Those of the section "Rules and Recommendations" are Articles comprising directives to be followed by adherents of this Code, and Recommendations comprising suggested procedures which for guidance in the interest of greater clarity and uniformity."

The question of penalties for violators of this Code is of no more relevance than for violators of the Botanical Code. There can be no enforceable penalties. There is no question in my mind but that the provisions of this Code will face the same vicissitudes in decades ahead as has the Botanical Code for the last ninety years.

3. Paragraphing. I recommend that this be left to the discretion of the Secretary of the publishing agency: the I.U.B.S.

4. Rules and Recommendations. I favour retention of the division of this Code into three sections. As suggested for the new para. 3 bis above, the definitions of terms and categories are not to be confused with directives for naming plants. The use of a Preamble such as in I.C.B.N. is good and indeed necessary if my ideas in 3-bis are rejected.

To distinguish directives (The Articles) from non-directives, I would refer to numbered items in sections A and B as paragraphs, abbreviated "para.".

The designation "Recommendation" was made to differentiate clearly between a directive whose use is mandatory by all who adopt the Code, and a statement of guidance where some latitude in procedure must be allowed. The merit of a procedure that is parallel to the botanical code is also pertinent. Decision on these points should be made on the principle involved, with no consideration whether the number of Recommendations be one or fifty.

5. Numbering Articles. I endorse the suggestion to omit parentheses around paragraph designators.

Reference to paragraphs of the Code is not so complex as Dr. Little makes it. Citation of any Article, such as Art. 1, can apply only to a provision of section C. If sections A and B are renumbered consecutively for the two sections, then these designators also may be dropped from citations and only paragraph numbers be cited, such as Para. 2. etc.

The idea of substituting numbers for letters (for subparagraph designation) was considered and rejected by the editorial committee of the I.C.B.N. and I vote against any such change for this Code. To effect it would remove a valued connotation and association of relationship of the subparagraph to the parent paragraph.

6. Footnotes. In principle I sympathize with Dr. Little's repugnance for footnotes, but those used in this draft of the Code were carefully considered

by the Editorial Committee. Each is that of a supplemental aside to the text, designed to add clarity or to give background information to the less well informed person. I favour their retention except in the following instance:

Footnote 3 of B-3 is a directive too strong for introduction to the Code at this time.

7. Anyone with basic knowledge of Latin knows the meaning of the international abbreviations such as e.g., i.e. Before rejecting them for English equivalents, I would want to know the opinion of commission members from non-English language countries as to which is easier to translate. I favour retention of the abbreviations because they are international and do save space.

8. Section B-2. Rather than delete the last sentence, I favour amplifying it to provide specific reference to the Appendix to I.C.B.N. that treats naming of hybrids.

9. Section B-2-a. Guidance given in the footnote should be helpful to the novice. I favour its retention.

10. I agree on deletion of the footnote not because it is a footnote but because the directive embodied is more adequately covered in Art. 2a.

The Commission may be interested to know that Dr. Little's prediction that single quote marks will not be widely adopted in the United States is known to be shared by many who are not conversant with the advantages of their use. The number who disagree with this prediction is steadily increasing.

11. No comment.

12. No comment.

13. I agree that lettering the subparagraphs of para. 4 is desired. I have no objection to deletion of last sentence.

14. Supplementary Categories. In the English language version of the Code I prefer retention of the designation "Section" vs. "Seotio".

Dr. Little's point in regard to convariety seems not in order. Botanists knowledgeable in nomenclatural procedures know that the category convarietas is admitted under I.C.B.N., as a category intermediate between varietas and forma. Less well informed horticulturists - some of whom are currently using the category convariety improperly - are believed to need the guidance here provided. I favour its retention.

15. Brackets and parentheses. Dr. Little's point is well taken, but it should be pointed out that while in British areas there are brackets and square brackets, in American areas the corresponding terms are parentheses and brackets. Both are used in America, and in horticultural literature. I recognize places for proper use of both in this Code. To make the text equally clear in all English-language areas I suggest the Code use the phrase "brackets or parentheses" whenever British usage would dictate "brackets" and "square brackets" when either usage would dictate that kind of punctuation mark represented by $\left[\right]$.

16. No comment.

17. Latin names. If Dr. Little's suggestion is adopted it should be qualified to apply only to "and other Latin-named taxonomic groups" since cultivars and clones also are taxonomic groups but are not of concern here.

I fail to see how application of this Article can lead to substantial duplication of names. The principle of priority prevails. If botanists give Latin names to cultivars already having cultivar names, those names by this Code are superfluous and are to be ignored by adherents of this Code. If botanists give Latin names, in conformance with I.C.B.N., to cultivars lacking a cultivar name then that Latin epithet is treated as if a cultivar name and no duplication follows.

18. Names must be short. Art. 1 is acceptable to me as it now reads. Dr. Little's suggested addition of "... and must be pronounceable without difficulty" is unrealistic, although amusing, for what Dutchman finds it difficult to pronounce those Dutch names that few other nationals can pronounce readily? No native Japanese can pronounce Rarepipes 'Ruddy Rival' and few Americans would recognize the name Walnut 'Detroit Grenadier' when pronounced by a Frenchman, yet I suspect Dr. Little would consider both cultivar names easy to pronounce.

There is much merit in omitting repetitious directives in the Code. Dr. Little's suggestion to delete Art. 31 seems sound. However, Art. 20 does not repeat Art. 1 d or 1 g. I believe Art. 20 should remain as now phrased.

19. Names must not be misleading. I disagree with Dr. Little's point. Whether or not a name misleads anyone is, in my opinion, outside the jurisdiction of this Code. It is one thing to point out in Sect. A. or B of the Code that no name should mislead anyone. Avoidance of misleading anyone is a laudable objective. But to direct by an Article of the Code that a name must not be misleading places an impossible onus on the Solomon who may be asked to adjudicate if, in fact, a particular name is misleading. Should such a Solomon rule a name to be misleading, surely its originator could swear he was never misled by it!

There is a very real difference between a name being "... clearly distinctive, not vaguely descriptive ..." and misleading. I favour retention of Art. 1 e as it now reads.

20. No comment.

21. I see no advantage in the suggested change. In the first place I object to the expression in this Code of "Horticultural variety". A cultivar is not restricted to horticultural subjects. The same cultivars of Taro, for example, are grown for ornament in U.S.A., as for food in Hawaii. Is it an "horticultural variety" in one plot and an "agricultural variety" in the other? All of this seems to point to the ultimate adoption of the term cultivar in place of the confusing term variety in English editions of the Code.

22. Art. 2 is restricted to typography and spelling. In my opinion Art. 3 i, j, and k do not come under these categories. I favour their retention under Art. 3, but agree with Dr. Little that i and k should be combined.

23. I agree with Dr. Little that Art. 1 g and i belong under the heading of Art. 3.

I believe the reference to appropriateness of forms of address was considered by the Editorial Committee, and Stearn Art. C.23 (b) dropped because while defensible for the English language was not so for all other languages. Individual I.R.A.'s may still legislate on this if they elect to do so.

24. I agree that provision of Art. 3 (m) is not of a "name to be avoided" as the heading of this article states. I am agreeable to its transfer to Sect. B. (3) as (b) (iv), rather than as new B (3) (e).

25. Dr. Little's condensed phrasing of Art. 4 is clear and acceptable to me. I like his redraft of the "Examples".

26. Because Recommendation 1 is phrased permissively rather than obligatively, it cannot be considered an Article as it now stands. To rephrase it, substituting "shall" for "may" would surely result in widespread violations at present. Perhaps the day will come when it will be acceptable as an Article. I favour Dr. Little's amplification of the Examples.

Perhaps there is merit in prefacing the three paragraphs following the Example by "NOTE". I favour retention in last paragraph of the phrase "as for some food plants" and its amplification to read "for some food and crop plants" since the practice is alien to most workers with ornamentals and this points to its relevancy. I see no reason for adding at the end of the paragraph "to be cited by name". It is already covered above.

27. Registration Authority. International should not be added here because in those areas where there is no appointed I.R.A. the function may be assumed by an unappointed society, which should be encouraged to function under the same procedures as the I.R.A. It would be official in the sense of acceptance by its membership [see Art. 14(a)]7.

28. Valid Publication. I think Dr. Little is incorrect in believing that "registration though equivalent, is not valid publication".

Art. 6 and 13 provide that a name is legitimate if either validly published or officially registered.

I agree, however, with Dr. Little's point. Rather than make his suggested deletion, I suggest changing last phrase to read:

"or by publication of a check-list, or other enumeration by an official Registration Authority which would provide for each name the date of its acceptance for registration."

It is necessary that these officially registered names be available in the printed literature, and not merely on file as a record in unicate if they are to be accepted as validly published. Acceptance of this would require change at close of second sentence of Art. 6, to read "... to be legitimate must be validly published (see Art. 7)."

29. Languages. Dr. Little is correct. If the phrasing remains as is, Article 9 should terminate with "... new name". The rest of the sentence should be as a Recommendation. The present phrasing surely was a scurilous attempt by the Editorial Committee to persuade adherants to treat the recommendation as an Article. Ignoble indeed, and caught by Dr. Little!!

30. Re description (Art. 10, Rec. 2). Art. 7 does not require a description, nor reference to a description, when publication is validated by recognition by an official Registration Authority. My suggested change (para. 28 above) does not alter this. The fact is that many registrars currently accept names without descriptions, or without descriptions that enable anyone to be able to distinguish the new plant from existing cultivars whose names already are registered. I favour retention of the Recommendation, regretting it is not an Article.

31. Illustration. Since Art. 7 does admit publication of a name without a description, it certainly must accept the same name without a description but with an illustration. As matters now stand, Dr. Little's suggestion seems out of order.

32. Starting Point. I favour inclusion in Art. 14 of Dr. Little's definitions, but as a NOTE to follow 14 (c).

The point he raises re priority of unpublished registers would be covered by my proposed change of Art. 13. If my suggestion is accepted, names in unpublished registers would have no standing and would not be considered in matters of priority.

33. Acceptable.

34. Acceptable if modified by "... original publication or that of the international registration authority of the genus ...". That is, in any case, priority should date from publication or from published date of acceptance for registration, whichever is the older, not from date of entry in some ledger or card file.

35. Acceptable.

36. This is much better than present phrasing.

37. Acceptable.

38. Acceptable, but delete also "If in Latin form" of 3rd sentence, and begin this sentence with "This name is subject ...".

39. In other words, move the "(a)" down one line. Good.

40. Acceptable.

41. Acceptable.

42. A (3) (A) p. 14 of draft.

While most desirable, I think it wholly impractical to try to include the address of the originator and/or introducer.

A (3) (b) Acceptable.

A (3) (c) Acceptable.

A (3) (e) Acceptable.

A (3) (h) Acceptable.

43. Libraries. This list is subject to change, but I agree with Dr. Little re substantial reduction of number in U.S.A. as a point of departure, I suggest deleting all U.S.A. entries except Arcadia, California, Boston, Mass.: Ithaca, New York: New York Botanical Garden: U.S.D.A., Washington, D.C.

REMARQUES ET COMMENTAIRES SUR LE NOUVEAU PROJET DE
CODE INTERNATIONAL DE NOMENCLATURE DES PLANTES CULTIVÉES
PRÉPARÉ À CAMBRIDGE DU 17 au 19 MAI 1957

par J. Pourtet

Remarques générales.

1. Il serait préférable que les articles soient numérotés de 1 à n pour l'ensemble du Code et non dans chaque section.

Cette unique série de numéros existait dans le premier Code publié en Juillet 1953 et la même méthode est employée dans l'I.C.B.N. Elle évite les erreurs et elle est beaucoup plus pratique que l'autre, car il est évidemment plus simple de se référer à l'article 8 ou 21 du Code qu'à l'article 3 de la Section A ou à l'article 6 de la Section C - Chapitre II.

C'est d'ailleurs le principe suivi dans la Section C qui constitue le véritable Code, mais un certain nombre de paragraphes des sections A et B peuvent être également considérés comme articles.

Une autre formule consisterait à intituler la Section A:
Introduction - Considérations générales

la Section B:

Définitions

et la Section C deviendrait le "Code" avec ses chapitres et ses 28 articles.

2. Le paragraphe 3 de la Section B définit avec précision "la variété (cultivar)" et après avoir précisé que le terme "cultivar" est un mot international, elle autorise l'emploi dans les différents pays comme synonyme de ce terme, les "termes particuliers applicables dans leur propre langue" aux variétés cultivées il paraît donc logique d'intituler ce paragraphe:

(3) The cultivar (variety)

dans le texte anglais.

Dans le texte français on écrira:

(3) Le cultivar (variété)

Dans le texte allemand:

(3) Der Cultivar (Sorte)

etc.

On aura ainsi une homogénéité dans les diverses langues ... mais ensuite il est parfaitement inutile de répéter tout au long du texte "variety (cultivar)" ce qui alourdit et complique le texte.

Je propose donc:

- soit d'ajouter à la fin du paragraphe, avant l'exemple:

.... "Dans le présent Code le mot cultivar (abbr. cv) est uniformément utilisé pour désigner les variétés cultivées (variety, variété, variedad, sorte, sort, ras, razza)"

Cela ferait disparaître 12 à 15 mots (et 24 à 30 parenthèses) par pages, diminuerait les risques d'erreurs et amènerait insensiblement les différents utilisateurs à employer le terme "cultivar", ce qui est souhaitable puisqu'il est uniforme internationalement.

- soit adopter la modalité ci-dessus mais autoriser les éditeurs nationaux à ajouter entre parenthèses après le mot cultivar, le terme localement utilisé. Mais dans cette éventualité le mot cultivar devra toujours être le premier comme dans le titre du par. 3 Sect. B et non en seconde position entre parenthèses.

Il ne semble pas que les partisans du maintien des expressions "nationales" puissent s'opposer au moins à la deuxième méthode.

Remarques de détail:

Section A. Je donne mon accord aux observations du Prof. Maatsch (Gartenbau- Nomenklatur - Ausschuss - Deutschland) sur par. 3 et 5.

Section B. Par. 1 et 2. Les définitions des catégories botaniques doivent être dans la mesure du possible reproduites de l'I.C.B.N.

Après le paragraphe 3 - Footnote 1: pour éviter un oubli, il faut indiquer dans l'exemple Lilium regale le nom d'auteur qui doit toujours être mentionné à la suite du binôme latin désignant l'espèce.

Par. 3 b)

(i) On pourrait ajouter comme exemple Picea excelsa Link cl. 'EST 1'.

Il s'agit d'un arbre "plus" sélectionné dans le Jura français. Forêt communale d'Esserval-Tartre et propagé par greffe pour servir de géniteur dans les vergers à graines.

(ii) Il serait souhaitable qu'un exemple permette de préciser comment doivent être désignées les graines d'essences forestières provenant d'un verger à graines (seed orchards): il semble s'agir, soit d'une lignée (line), soit d'une lignée hybride (hl).

Nos collègues suédois et danois qui produisent déjà commercialement des graines dans leurs vergers à graines devraient être consultés.

Section C - Chapitre I

Art. 1 - b et c). Il semble comme l'indique d'ailleurs le Prof. Maatsch, que c) doive être révisé: en effet, il est souvent difficile de savoir si le vieux nom latin appliqué par tradition à un cultivar a été décrit comme une variété botanique ou non. Il en est ainsi par exemple des peupliers uniformément désignés autrefois sous des noms latins même quand leurs auteurs savaient qu'ils décrivaient une plante cultivée (Populus italica Du Roi par exemple).

On risque donc de créer des confusions en obligeant à la suppression de noms très connus et pourtant décrits comme variété botanique (Populus robusta Schneid.) tandis que des noms moins connus seraient conservés parce qu'ils n'ont pas été décrits comme variété botanique ou qu'on ne connaît pas cette description.

Je propose donc que le paragraphe (b) actuel soit complété comme suit:

"Cependant il est recommandé de remplacer ce nom latin par un nom de fantaisie chaque fois que cela sera possible sans inconvénient.

Exemple: Populus deltoides 'carolin' est préférable à Populus deltoides 'carolinensis'.

Cette substitution d'un nom de fantaisie au nom latin est obligatoire quand le nom latin a été employé pour une variété sauvage et a fait l'objet d'une description conforme aux règles du Code international de nomenclature botanique"

Le paragraphe (c) serait supprimé.

Art. 2. a) Ajouter l'exemple suivant:

Populus nigra L. var. caudina Ten et

Populus nigra L. 'Italica'

Art. 3 a) Ajouter aux exemples

.... Peuplier 'Eucalyptus'

(Ce nom qui fut couramment utilisé en France est interdit par la réglementation actuelle du commerce des semences et plants forestiers).

f) Je partage l'opinion du Prof. Maatsch: un article spécial doit être consacré à l'emploi des numéros; il serait regrettable de paraître les interdire en en traitant sous l'article 3.

m) Exemple "Salsify" est un nom vernaculaire et ne doit pas être souligné.

Art. 5. Recommandation 1

Exemple: Il faut que le code montre l'exemple, on doit donc écrire le nom d'espèce et pas seulement celui du genre: Weigela praecox 'Avalance' (Lemoine).

Art. 23 a)

Exemples: Ajouter "Populus x euramericana" est le nom collectif latin pour les cultivars dérivés des croisements interspécifiques entre Populus nigra et Populus deltoides. Les cultivars qui appartiennent à ce groupe hybride seront désignés comme suit Populus x euramericana 'I-214'".

Art. 27 d)

L'exemple du Solanum ne semble pas devoir être supprimé comme le propose le Prof. Maatsch mais écrit:

Solanum + tubingense mx. 'Koelreuterianum'.

Appendix I

Il me semble regrettable que l'enregistrement ne fasse l'objet dans le code lui-même que des 3 lignes de l'article 13 et que les détails très utiles soient donnés dans l'appendice Celui-ci pourrait devenir un chapitre qui prendrait place entre les chapitres IV et V et qui comprendrait l'art. 13 plus les paragraphes 1 à 5 de l'appendix I; celui-ci ne comprendrait plus que les "Rules for the guidance

Appendix II

Il serait bon d'ajouter:

Paris - Museum national d'Histoire naturelle, 57 Rue Cuvier

COMMENTS ON THE DRAFT

International Code of Nomenclature for Cultivated Plants
dated May, 1957.
by Dr. Stafleu

This is really a very important step forward. It is much easier to read and to consult. The earlier presentation was distinctly less clear and more difficult to consult.

I have a few remarks of minor importance:

1. I am still a little uneasy about the language problem. Why not add one non-western language to the classical three. Why not strongly urge that either English, French, German or Russian be used. These four will probably be the four languages of the Montreal Botanical Code.
2. Art. 2 b I am not so sure that the statement that double quotation marks are used in botanical literature etc. is generally valid. Single quotes are often used for this purpose too! Why not leave out the entire paragraph. After all you have advised to use single quotes.
3. Art. 28 Better put the Secretary's name and address in a footnote - e.g. Secretary h.t.: Dr. H. R. Fletcher, Royal Botanic Garden, Edinburgh, 4, Scotland - and leave it to the Code to state that proposals are to be submitted to the Secretary.
4. App. II What about Arnold Arboretum Library?
5. In referring to I.C.B.N. add "ed. 1956" to those quotations in which numbered articles or parts are mentioned. There are already two Codes with different numberings, a third one will probably follow after Montreal.
6. The convarietas appears as a botanical category whereas it is not mentioned in I.C.B.N. I know: "If necessary supplementary categories ..." Still it is not elegant. However, it does no harm any more in this modest place. I have never been very enthusiastic about this concept.
7. Put a cross reference to Art. 7 in Rec. 1 where "validly publishing" is mentioned. This has not yet been defined at that place.
8. Does not Art. 15 leave the door wide open for exceptions? It would seem to me that such exceptions could only be granted by the Registration Authority and not by individuals. If this is what is meant it might be better to say so in order to prevent abuse. From Art. 16 it seems that this is indeed what you want.
9. Rec. 5 seems not a very happy one. Why not recommend the alphabetical sequence (as in I.C.B.N.) and give the advice to add the sign ♀ to the female parent if known. As it stands now you will often not know what is really meant by the formula and whether or not the first quoted parent is indeed the ♀ one.

COMMENTS ON THE DRAFT

International Code of Nomenclature for Cultivated Plants
dated May, 1957
from Agronomy Departments of all Land-Grant Colleges in the United States

Section B (3)(b) "Special kinds of varieties (cultivars)".

1. (iii) a hybrid-line.

Several individuals have cautioned that the word hybrid-line should be restricted to the first generation of the hybrid. In Europe succeeding generations are presently being utilized and it is feared our definition "by repeated crossing" will lend to confusion. It is therefore suggested the following language be substituted for paragraph (iii) and Footnote (3):

"(iii) a hybrid-line⁽³⁾ When a variety (cultivar) is the first generation of a specific hybrid, the term 'hybrid-line' or abbreviation 'hl' may be"

Footnote (3) "A uniform group, which is the F₁ generation, derived by crossing (made to obtain heterosis or hybrid vigour) each time the variety is produced, two or more constantly maintained breeding stocks, these being maintained either by continued inbreeding or as clones. Use of the term is restricted to the first generation of the hybrid mating."

In the example in (iii) the hybrid corn should be written "US13" rather than "U.S. - 13". All hyphens and periods should be omitted. Also please note the first filial generation should be written "F₁" rather than "F. 1".

- yes (
2. A suggestion has been made that a fifth kind of variety be listed; namely, variety reproduced through apomixis. Many of the perennial grass varieties, such as *Poa pratensis*, are largely reproduced in this manner. My first reaction is that such varieties are covered under (i) because apomixis actually is propagation by vegetative means. Such varieties, however, are not usually derived from a single individual and, therefore, would not qualify under (i). My personal feeling is not strong in this matter but I think it should be given consideration.
3. Why is the word "special" required in the heading for this paragraph, "Special kinds of varieties (cultivars)"? As we state, "A variety (cultivar) may consist of any one of the four following kinds of unit" are not all kinds of varieties included in this paragraph instead of "special" kinds?

A late suggestion has been received to the effect that of 14 libraries receiving catalogs listed for the United States, 4 are on the west coast and 7 on the east coast. It is suggested that the library at the State Colleges or Universities of Texas, Louisiana or North Carolina be considered as an addition to the list.

International Code of Nomenclature for Cultivated Plants
dated May, 1957,
by Dr. E. Sinskaya

1. Section B (4) - "supplementary categories", (b) - "within a species, or intraspecific hybrid, which includes a large number of varieties (cultivars), assemblages of similar varieties (cultivars) may receive distinguishing as groups".

It seems to me that the term "groups" is not definite enough and may lead to confusion and misunderstanding.

In particular I would draw your attention to the fact that in the practical work of the All-Union Institute of Plant Industry in Leningrad we use the term "agroecological" or "ecologogeographical" group in the classification of cultivated plants. This to a certain extent corresponds to "ecotype". However for plants included in the ecotype a common origin is considered necessary. On the other hand, for plants included in the "agroecological group" it is not always possible to achieve clarity with regard to common origin. In the latter case we have to count with the possible existence of convergent processes to a greater or lesser extent.

Academician P. M. Zhukovsky told me that at one of the first meetings of the International Commission the question was discussed of substituting the term "group" by the term "conculita" which would correspond to the Russian term "sortotypus".

Personally I would suggest the term "conculivar", which would sound nearer to the term "convarietate" (used for botanical varieties).

2. Section C. Art. 4 "Cultivar name must be attached to either "a scientific name or a common name".

Here I think that the term "cultivar" should always be attached to a definite taxon. The use of common name leads to misunderstandings, taking into consideration the international significance of the Code.

3. In the list of libraries which are to receive information of the new names of plants and their descriptions I should like to see the library of the All-Union Institute of Plant Industry in Leningrad.

COMMENTS ON THE DRAFT

International Code of Nomenclature for Cultivated Plants
dated May, 1957
by T. A. Russell

1. Section B. 1st sentence. "The three main categories or levels
....." This is clumsy and I prefer the
following:-

"A cultivated plant commonly is given three
names designating its genus, species, and variety
(cultivar)."

- yes
2. Section C. Chap. I Art. 1 (Also A Art. 3 and perhaps elsewhere).
"vernacular or 'fancy' names". Vernacular is I
think incorrect and "fancy" displeasing, but it is
difficult to find a better. I suggest popular,
used in the sense defined in the dictionary as:-
"suitable to or intended for common people:
easy to be comprehended: not technical or abstruse:
plain: familiar. (The Times Century Dictionary.)"

COMMENTS ON THE DRAFT

what is reasonable?

International Code of Nomenclature for Cultivated Plants
dated May, 1957.
by F. R. Horne

Section A. para. 3. I wonder if it might be more appropriate to quote one horticultural, one agricultural and one forestry example here, instead of two both from horticulture.

Section A. para. 4. Line 4. I suggest "reasonably uniform" as being less restrictive than "possible".

Article 19. As at present worded the second sentence on page 10 seems to give priority to the first transliteration or translation over the original name, even if that had been in use in the foreign country for some time. This is presumably not the intention and perhaps in the second line on page 10 the sentence might start "When there are objections to retaining the original name from the country of origin and this name has not been validly published in the new country, the first validly published translation or transliteration becomes the correct name in a particular language".

Appendix 2. Is it the intention here that the Botanic Gardens should distribute copies of these to the agricultural, and other applied centres? If not it might be best to place the National Institute of Agricultural Botany, Huntingdon Road, Cambridge, on this list of libraries to receive catalogues and lists containing new names and/or descriptions.

Would it be wise for this appendix to be classified into those wishing to receive descriptions for Horticulture, Agriculture and Forestry?

COMMENTS ON THE DRAFT

International Code of Nomenclature for Cultivated Plants

dated May, 1957

by Dr. M.G. Weiss

1. Page 3 - Section B (3)(b)(iv). In the examples, the reference to Medicago sativa is in error. It should read as follows: Medicago sativa 'Ranger', the breeder's seed of which is derived from intercrossing five seed-propagated lines each maintained under isolation.
2. Page 10 - Chapter III, Article 20, Commercial Synonyms. We suggest indicating on what basis names may be changed. We assume such reasons as linguistic difficulties are involved. Are there others?
3. Page 12 - Chapter IV, Article 26. In the last sentence of the first paragraph the term "first producer" is used. It is suggested that the term "originator" be substituted therefor to differentiate between the originator and producer of seed or stock.
4. Page 13 - Appendix 1(1). In the last sentence of this paragraph, the term "stockholder" is used without definition. Could the sentence be revised as follows: "The Registration Authority may legitimately require the proposer of a new name for a plant of which he is not the originator or sole sponsoring individual to give evidence that the permission of the originator or sponsoring individual, company, or agency has been obtained."
5. Page 14 - Appendix 1, Rules for the Guidance of Registration Authorities. A(3)(c). Again the word "stockholder" is used. Would it not be better to substitute "the name of the individual, company, or agency who names the variety (cultivar)."

of interest

COMMENTS ON THE DRAFT

International Code of Nomenclature for Cultivated Plants
dated May, 1957.
by A. Thorsrud

In section B (3) you have clearly defined the term cultivar as an international word for the different names in different languages. In section A (3) and throughout the code, you are writing "variety (cultivar)".

In Russian, German, Netherlandish, Italian and Scandinavian countries etc. one has no difficulty as to the mixing of the botanical term "varietas" with the term of cultivated plants, as you often do in English. As we very often are in doubt on this behalf in the reading of English literature, we are willing to give up our term in order to get a clear international code.

Therefore I think it would be wise that also the English speaking people would be willing to take their share in this situation. I would consequently prefer the wording "cultivar (variety)" in the English text instead of "variety (cultivar)".

In other languages I hope one will use the wording cultivar only, without the national equivalents.

COMMENTS ON INTERNATIONAL CODE OF NOMENCLATURE FOR
CULTIVATED PLANTS (JUNE 1957 REDRAFT)

By Elbert L. Little, Jr.

1. Dates and retroactivity. A definite statement on this important subject would be highly desirable. I repeat my questions in my letter of May 9, 1957, to members of the Editorial Committee: "It is not clear to me to what extent, if at all, the Code is retroactive. Is the Code only a guide for naming new varieties (cultivars) in the future? Or must old names already in use be changed or rejected to conform to the Code?" When does the Code become effective?

2. Penalties. A statement that illegitimate names or "names contrary to a rule cannot be maintained" (I.C.B.N. Preamble) would be helpful. Perhaps it could be inserted under General Considerations and Guiding Principles. Or perhaps a statement asking for voluntary adherence to the Code by all users of variety (cultivar) names. Are there any penalties for willful violation of the Code?

3. Paragraphing. Regular indenting of paragraphs is suggested to save space and make the text clearer to read. Also space would be saved by putting the headings as side heads followed by text on same line, as in this paragraph.

4. Rules and Recommendations. I favor deleting this heading which involves the introduction of chapters. If retained, Rules and Recommendations should be defined as in I.C.B.N. (Preamble). Also, it seems that Section B. Categories and Their Designations, consists of Rules also, as in I.C.B.N. If the numbered paragraphs in Section B are not articles, what are they and how should they be cited? Only five recommendations are so named and numbered. Perhaps it would be simpler to designate these recommended procedures merely as unnumbered Notes, as in the previous drafts of the Code.

5. Numbering Articles. For ready reference and citing, I repeat my suggestion for elimination of subdivisions awkward to cite, such as Section B (3) (b) (i). Also, I would prefer to start numbering at the beginning with Section A as Article 1. The paragraphs under Section A are numbered 1, 2, 3 etc., while those under Section B are numbered with parentheses (1), (2), (3), etc. I suggest omission of parentheses.

6. Footnotes. I repeat my suggestion to incorporate footnotes into the text for easier reading and also easier citing and translating. Definitions would be clearer in the text. Names such as in Art. 3 (a) footnotes and Art. 19 footnote could be put in parenthesis to avoid footnotes. Some foreign languages may not show footnotes clearly. However, I suggest one footnote for Art. 28. It seems better to put the Secretary's personal name in a footnote, rather than a permanent part of the Code.

7. E.g. and i.e. These Latin abbreviations in a few places might be replaced by "for example" and "that is" for clarity and for ease in translating. For example, Section B (3) (c), line 10, "(for example, if the season of flowering ...)" Also in Art. 1 (e), Section B(1), etc.

8. Section B (2). I suggest deleting the last line: "For further particulars concerning hybrids see Chapter IV."

9. Section B (3) (a). I suggest deleting the footnote and inserting in first line, as follows: "(a) The term 'cultivar' (abbreviated as cv.; see Section C) is an ..."

10. Section B (3) (a) footnote (3). Single quotation marks. I suggest deleting this footnote, which has stronger language than Art. 2 (a) and does not agree with the latter. Under Art. 2 (a), single quotation marks are not required. It seems sufficient to distinguish the variety (cultivar) by the initial capital. My opinion is that single quotation marks will not be widely adopted in the United States.

11. Section B (3) (b) (i). Forestry examples. As there are only a few forestry examples, I should like to add one for the foresters, such as a poplar clone. J.D. Matthews proposed examples also. To avoid a hybrid, controversial name, or Latin name, I offer this tree clone as an example under Section B (3) (b) (i): Populus nigra cl. 'Vert de Garonne'. Though I do not know this clone, I find it listed as an example in the FAO International Poplar Commission report as well as in another report.

12. Hybrid-line. Section B (3) (b) footnote 3, line 1.

Suggested change: "A uniform group, the first-generation (F_1) hybrid, which is derived..." See also Art. 11, Recommendation 3.

13. Section B (4). Two of the four paragraphs are not identified by letter. For more precise citation, I suggest that these four paragraphs be designated (a), (b), (c), and (d). Also, I suggest omitting as obvious and unnecessary the last sentence, beginning: "In such cases, the arrangement..."

14. Section B (4) (a). Supplementary categories. In Section B (4) (a), line 3, I suggest the Latin "sectio" instead of "section" for consistency and "and" for "or", thus: "sectio and series". Also, as convariety is not mentioned in I.C.B.N. and not further mentioned or defined in this Code, I suggest that "convariety (convariety)" be deleted here and in the examples.

15. Brackets or parentheses. For example, "brackets" in Section B(4) (a), line 5, and "parenthesis" in Art. 5, Rec. 1, line 1. In the United States the curved brackets are called parentheses. Usage in the Code should be consistent throughout, either all brackets or all parentheses "()". I vote for all parentheses.

16. Art. 1 (a). Examples. Typographical error, "noy" to be changed to "not".

17. Art. 1 (c). Latin names. I suggest the insertion after "botanical varieties" of "and other taxonomic groups", because some varieties (cultivars) will be named as forma, etc. It will be interesting to see how this Article works. It may lead to much duplication of names. Some plant taxonomists will continue to give Latin names to varieties (cultivars). Of course, this Article might be repealed later, if thought desirable.

18. Names must be short. This statement or idea occurs five times in the Code: Art. 1 (d), Art. 1 (g), Section B (3)(c) Example (1), Art. 3 (1), and Art. 20 Example. Perhaps some duplication and examples could be omitted and the main statement placed in Art. 1 (d) to include Art. 1 (g), somewhat as follows: "(d) A name must be short, preferably of one or two words and not more than three words, and must be pronounceable without difficulty".

19. Names must not be misleading. This idea is important. For example, one of the rules and regulations under the Federal Seed Act of the United States is: "The variety name shall not be misleading". I suggest that Art. 1 (e) have the words "or misleading" inserted, as follows: "(e) A name must be clearly distinctive, not vaguely descriptive or misleading. EXAMPLES ..."

20. Stearn Art. C 22: Fletcher Art. C 10 (c). I do not find in the redraft this statement that the word "variety" must not form part of a new variety (cultivar) name.

21. Art. 2 (a) Examples. The examples would be clearer if put in a separate sentence and with explanation, such as:

"EXAMPLES. Paeonia lactiflora var. trichocarpa is a botanical variety, while the following are horticultural varieties (cultivars), Paeonia lactiflora 'Festive', Paeonia x festiva 'Mutabilis', and Paeonia 'Festiva Maxima'. Hemerocallis fulva var. disticha and Hemerocallis 'Alba Striata'."

22. Art. 2. Rules of Typography and Spelling. I had more statements under this heading. It seems logical to put here Art. 3 (i), (j), and (k). I would combine here Art. 3 (i) and (k) as: "Personal and geographical names are not abbreviated".

23. Art. 3. Names to be avoided. Possibly some names to be avoided that are mentioned in Art. 1 might be placed here. For example, Art. 1 (i) and (g). I do not find here the statement that forms of address liable to be confused (Mr., Mrs., etc.) should be avoided (Stearn Art. C 23 (b); Fletcher Art. C 10 (e)). Perhaps the Editorial Committee made the deletion.

24. Art. 3 (m). Polyploids. This statement on designating polyploids by name or symbol (Stearn Art. C 30; Fletcher Art. C 10 (q)) seems out of place here. I suggest placing this statement under Section B (3) as (e) or possibly under (b). My suggested wording is: "A cytologically differentiated assemblage such as a polyploid may be designated, if desired, by an appropriate symbol or name. EXAMPLES ..." (Plural, not EXAMPLE for two).

25. Art. 4. Position of variety (cultivar) name. I suggest that the sentence be shortened to read as follows: "The variety (cultivar) name must be attached to either a scientific name or an unambiguous common name and may either precede or follow the common name".

I suggest changing "EXAMPLE" to plural and inserting commas after "French" and "German". Also, changing last example to read: "But not Syringa 'Virginal' or 'Virginal' Syringa, which refer instead to the ambiguous English common name Syringa for the genus Philadelphus".

26. Art. 5. Recommendation 1. Name of originator, introducer or describer. This seems to me to be a Rule and an Article, at least in part.

I suggest that the statement and example (Stearn Art. C 19 Note 2; Fletcher Art. C 8 Note 2) be restored as follows (after second sentence): "This citation remains unchanged when the variety (cultivar) name is transferred. ... EXAMPLE. Weigela 'Avalanche' (Lemoine), which becomes Diervilla 'Avalanche' (Lemoine) when the two genera are united".

Also, the last sentence, suggested revision: "In some instances, varieties (cultivars) offered for release by a public agency, such as an experiment station or institute, to many introducers, may have no single introducer to be cited by name".

27. Art. 6, Art. 7, Art. 8, Art. 10, Art. 13. Registration Authority. Should "International" be inserted here, as in Art. 14, Art. 17, and elsewhere? If national is meant perhaps "National Registration Centre" should be mentioned.

28. Art. 7. Add title "Valid Publication". Also underline these two words at beginning of first sentence. I suggest deletion from the first sentence of ", or by recognition by an official Registration Authority". Registration, though equivalent, is not valid publication (Art. 6 and Art. 13).

29. Art. 9. Languages. This seems in part a recommendation. Suggested revision: "Any modern language can be used for the valid publication of a new name. However, it is strongly urged that one of the following be used, English, French, or German, especially if the language of the publication is not in Roman characters."

30. Art. 10, Recommendation 2. This recommendation seems unnecessary, as a description is required for valid publication under Art. 7.

31. Art. 12. Illustration. I suggest deleting " (except as provided by Art. 7)", because Art. 7 does not mention illustrations.

32. Art. 14. Starting Points. I think a statement defining dates of publication and registration, such as Art. C 21 of my draft, would be helpful, as follows: "For purposes of priority, the date of valid publication of a name is that when the printed matter was distributed or became available, while the date of registration is that when the name was accepted and entered on the register by the official International Registration Authority". Otherwise, there may be questions of priority of

competing names. There is no explanation of priority except for mention of the "earliest legitimate name" under Art. 6. I assume that before 1959 priority might date from unpublished international registers.

33. Art. 16. Synonymy of Rejected Names. Though this was partly my suggestion, I believe it would be better to emphasize synonyms, which are mentioned in Art. 6, than rejected names, which are not. Suggested revision: "Art. 16 Synonyms. Synonyms or rejected names are to be recorded in the official register of the genus or group or in some other appropriate manner".

34. Art. 19. Translations and Transliterations. Suggested shortening of last sentence: "Priority for the name dates from the original publication or international registration and not from the later transliteration or translation".

35. Art. 20. Commercial Synonyms. I suggest change of first line to define the term, as follows: "Commercial synonyms are names changed because of linguistic or other difficulties and may be used ..."

36. Art. 22 Formulae. I suggest adding at end "(X)" as in Art. 23 (a). Also suggested wording to agree with I.C.B.N. Art. H 3: "The formula consists of the names of the two parents connected by the multiplication sign (X)".

37. Art. 22. Recommendation 5. In last line, "this" has no antecedent. I suggest the insertion of "order" after "this". As female sign is mentioned, I wonder if male sign should be added and both signs put in parentheses.

38. Art. 23. Collective Names. (b) In line 2 after "collective name" insert "in Latin form". Then delete third sentence, which is repetition of Art. 23 (a).

39. Art. 24. I suggest putting "Grex" as heading. Also, (b) and example could be shortened to positive example under (a), as follows:

"Rhododendron (Jalisco grex) 'Eclipse' or Rhododendron (Jalisco Hybrids) 'Eclipse' but not Rhododendron 'Jalisco' var. 'Eclipse'."

Also, in Art. 24 (b) last line, change "collective designation" to "collective name".

40. Art. 26. Variety (Cultivar) Names of Interspecific Hybrids. In last line, I suggest changing "producer" to "originator".

41. Art. 28. Modification of the Code. No mention is made of selection of members of International Commission for the Nomenclature of Cultivated Plants. It might be helpful to add a statement like this: "This commission is composed of twenty-five representatives of agriculture, horticulture, and forestry from various countries".

42. Appendix 1. Rules for the Guidance of Registration Authorities. I suggest dividing these rules into a few sentences and that A, (1), (2), (3), B, and C all begin with capital letters and end with periods.

A (3) (a). Suggested change to include address: "(a) the name and address of the originator and/or introducer;"

A (3) (b). Bud-mutant ('sport'). To agree with the Code, Section B (3) (d), I suggest changing "vegetative sport" to "bud-mutant ('sport')".

A (3) (c). As "stockholder" is not defined, I suggest changing to: "the name of the person who named the variety (cultivar);"

A (3) (e). Parentage and history. To agree with Art. 11, I suggest changing "parentage" to "parentage and history".

A (3) (h). Suggested change to agree with Art. 11: "(h) description or definition of the variety (cultivar), such as classification, characteristics, colour, chromosome data, etc. (The name of the Colour Chart used, if any, should be mentioned)". I suggest adding after (h) to agree with Art. 11: "(i) comparison with related varieties (cultivars) mentioned by name;" I suggest adding after (h) and (i): "(j) method of propagation".

43. Appendix 2. List of Suggested Libraries to Receive Catalogues and Lists Containing New Names and/or Descriptions. Fifteen of the 38 are in the United States and should have U.S.A. added to the address. This number is a rather high proportion for one country, while some parts of the world are not represented, for example, India, Brazil, Africa, Mexico, and Central America. Possibly several from the United States might be left out or put in a second list primarily for national publications. For example, four cities of the United States (also London) have two listed libraries each, New York City, Boston, Los Angeles, and Washington, D.C. For publications from over the world, one library in a city should be sufficient coverage.

COMMENTS ON CAMBRIDGE RE-DRAFT OF CODE

by

A. Simmonds (Royal Horticultural Society)

Page 2
Footnote 3

This does not mention the third course allowed by Art. 2a.

Page 2

(b) (iii) Example

'Texas Early Grano 951' and 'Hybrid corn U.S. - 13' are very undesirable examples in that the cultivar names include numerals contrary to the ideal and the spirit of Art. 3(f).

Moreover, if the phrase "except as custom ----- dictates" is to be invoked, where are we? The Code is largely a collection of recommendations to cease to do what has been customary, and the department of Agriculture should set an example to commercial plant-breeders by adopting the Code.

Page 3

(4) (a)

line 8 from bottom

"useful or necessary" should, I think, be "necessary or useful".

Page 4

Art. 1 (a)

Examples

"noy" ? "not".

Page 4

Art. 1 (c)

"Varieties (cultivars) given Latin names ----". Should not a date be inserted after "names"? The whole sentence needs re-writing, as it is not "Varieties" which "shall not be accepted" but the names given to them if the names are in the Latin form.

Page 4

Art. 1 (f)

penultimate line

"a large number" gives "a large" degree of licence. Some other phrase is desirable, such as "or more than a few names with the same initial word".

Page 5

Art. 1 (h)

line 8

"historically important as an ancestor ----". Insert "e.g." after important, because some "historically important" plants were and are sterile and have no progeny.

Page 5

Art. 1 (h)

Example

"(even if used for a town in New Zealand)". Should not the words "even if used for" be deleted?

Page 5

Art. 2 (a)

line 2

After "enclosing" insert "the former".

line 3

Should not "scientific name" be "botanical name" in this and similar circumstances? it would seem to me that the Code is a scientific document dealing with horticultural

names and that cultivar names given in accordance with the Code are given scientifically and are therefore just as "scientific" as botanical names given in accordance with the Botanical Code.

Page 5

Art. 3

first two lines

The words "must be avoided" do not make sense in view of the wording of the succeeding paras. Delete the words "The following --- confusion" and substitute "In order to prevent confusion, when naming a variety (cultivar) regard should be had to the following: -."

Page 5 .

Art. 3 (a)

"The scientific or vernacular"? "The botanical or vernacular".

I don't think (a) is very clear. It might run in some such way as

Neither the botanical nor the vernacular name of a genus may be used as a variety (cultivar) name. E.g. Carnation "Pelargonium" is not permissible as it might be referred to as "Pelargonium Carnation" or, in a cable, as simply "Pelargonium". Rosa 'Camellia' and Plum 'Apricot' are other examples.

Page 6

Art. 3 (e)

This seems an unnecessary restriction. I know of no disadvantage which has arisen through such names as 'Charles Ross', 'James Grieve' or 'Bartlett' being the names of the raisers or introducers of the fruits to which they refer.

On the other hand, the rule, if made, will tend to encourage strings of names beginning with the same word, e.g. "Laxton's".

Page 6

Art. 3 (f)

I have already referred to this. I would like to see the words "except as custom in certain groups dictates otherwise" deleted. As the para. says, numerals are only suitable as temporary designations. The Cambridge people who, in the past, have allowed some of their productions to get into commerce under numerals, have agreed that in future a name shall be substituted for the temporary designation before a new variety is put into commerce. Other people should follow that lead.

Page 6

Art. 3 (g)

Para. needs editing. The words "must not be used" should precede "when", but would not be satisfactory. "as" would be better than "when".

Page 6

Art. 3 (i)

Delete "first" and add just before the full stop "or 'George C. Creelman'."

If initials are to be permitted as part of a cultivar name, which God forbid, Art. 1(d) must be altered. The American contention about the habitual use of names like "Franklin D. Roosevelt" has no real substance. Have you heard of anyone referring to George Lawrence as "George H.M."? In any case, initials in cultivar names are very undesirable and we should strongly resist their permissibility.

Page 6

Art. 3 (m)

Delete, as it conflicts with Art. 1(d) and the spirit of Art. 3 (f).

Page 7

Art. 4

For "scientific" substitute "botanical".

Two entirely distinct matters are mixed up in this Article. The words "provided the latter is unambiguous" should be deleted together with the second part of the example beginning "BUT NOT". Those two passages have nothing to do with cultivar names, which are the subject being dealt with. They relate to undesirable vernacular generic names.

Page 7

Art. 5

In both places, substitute "botanical" for "scientific".

COMMENTS ON THE CAMBRIDGE REDRAFT OF THE CODE

by

Dr. Nils Hylander

Section B.

After (2) add the following note:

NOTE. In complicated groups or when the parents of a variety (cultivar) is not known with certainty, the designation belonging to this level may be dropped and the variety (cultivar) name follow immediately upon the generic name, or the designations of levels (i) and (ii) may be combined in form of a common name of a species or even of a wellknown subdivision of a species. If the name of level (ii) is dropped, the scientific generic name may be replaced by the common vernacular name of the genus concerned. (See Art. 3 with examples).

Footnote (3), p. 2

This is in conflict with Art. 2 (a), p. 5, where still another possibility is given for the distinction between variety (cultivar) names and epithets, namely "placing the scientific name in italics"; the quoted sentence should be deleted!

Section B (3) (b) (iii) /sic! - not a very convenient way for cross-references!/
The concept "identity symbol or number" is not mentioned elsewhere in the Code! What are the interrelations between that and variety (cultivar) name??

Section B (3) (c) and (d), p. 3

The naming of bud-mutants is mentioned in both paragraphs, which is unnecessary. The wording of c is in its later part terribly complicated. On the whole the redraft of (c) is, in my opinion, less clear than the wording proposed by me this spring. Since the editorial committee is partly of other opinion as to the mention of the terms strain etc., I have tried to give the following rewording of (c), in which I have included some points from my earlier version which I think should not be dropped.

(c) During the course of improvement work on a variety (cultivar) selections are often produced which show slight differences from the parent variety (cultivar), for instance as to disease or frost resistance, exposure of the flowers or time of ripening, or which give a somewhat heavier average crop than this but which do not deviate enough to allow the recognition of a distinct new variety (cultivar). Such a selection is sometimes referred to as a "strain", "Stamm", or equivalent term, but this practice has not been adopted in this Code.

When such a selection deviates markedly enough in any significant respect from the parent variety (cultivar), it should be treated as a new variety (cultivar) and get a variety (cultivar) name of its own. If desirable, the relationship between the new and the parent variety (cultivar) may be indicated by forming the new name in close connection with the name of the latter, e.g. by addition of some word.

This course, which may also be used for new bud-mutants, should not be followed when economically important characters, such as the season of flowering or ripening or the period of use, have been markedly changed. Excessively long names resulting in this way must be avoided (see Art. 8 c and 9 d).

Ex. Cabbage 'Wisconsin All Seasons' .. 'All Seasons'; Apple 'Crimson Bramley' .. 'William Copland'.

Sect. B (4) (a), p. 3.

Delete the example Brassica (sect. Sinapis) 'Dutch Yellow' - for two reasons: 1) since there is no urgent need for including the genus Sinapis s. str., i.e. sect. Leucosinapis, in Brassica (where its name as a section should, I think, not be Sinapis but Leucosinapis - a section S. including both S. alba and S. arvensis is quite unnatural); 2) while there is no reason to mention the cultivar 'Dutch Yellow' in this peculiar way instead of calling it Sinapis alba 'Dutch Yellow'. We should not use the method of attaching the cultivar name immediately to the generic name in such simple cases.

Sect. B (4) (b), p. 4.

Ex. Insert after Pisum: sativum. /Obs. These examples refer to groups within species!/
Section C. Chapter I should be divided into two: Chapter I. General Regulations, and Chapter II. Rules for naming new varieties (cultivars).

This is in order to give a clearer and more logical arrangement of the paragraphs relating (a) to the present status and (b) to the regulations to be followed from 1959.

Chapter I. General Regulations.

Art. 1. The variety (cultivar) name, or the first word of it, must begin with a capital letter; capital letters should also be used for other words in the variety (cultivar) name except where national custom demands otherwise.

Ex. See my proposals 1957.

Art. 2. The variety (cultivar) name shall be distinguished typographically from a scientific ("Latin") botanical epithet by placing the abbreviation cv. before it or, preferably, by including it within single quotation marks.

Note. The use .. / as before; Obs. the note belongs also to Art. !/
Double quotation marks etc.

Art. 3. The variety (cultivar) name is attached either directly to the generic name or its equivalent (as mentioned in Sect. B (1)), or, preferably, to the scientific or common name of the species or interspecific hybrid (or graft-chimaera) to which it belongs, or, if desirable, of a subdivision of a species (cf. Sect. B (2) and (4)). Common names may either precede or follow the variety (cultivar) name but may only be used if they are unambiguous.

Ex. Iris 'Ambassadeur'; Syringa vulgaris 'Mont Blanc' or Lilac 'Mont Blanc' or 'Mont Blanc' Lilac (in French Lilas 'Mont Blanc'; in German Flieder 'Mont Blanc' or 'Mont Blanc' Flieder); Foeniculum vulgare var. azoricum 'Perfektion'; Brussels Sprouts 'Long Island'.

But not Syringa /obs. not in italics!/'Virginal' or 'Virginal' Syringa as designation for a Philadelphus variety (cultivar), since the "common" name here is ambiguous and may easily be mistaken for the synonymous botanical generic name Syringa.

Art. 4. The variety (cultivar) name does not form part etc. (as in present Art. 5).

Appended to this the recommendation 1 as in the Committee's redraft.

Art. 5. The variety (cultivar) name must not be followed by another variety (cultivar) name, either preceded by "var." (or a similar word) or not (see Art. ... under Hybrids; present p. 12).

Art. 6. Designations such as N.N.'s variety (or form or type), or their equivalents in other languages, are not considered as legitimate variety (cultivar) names.

Ex. A form of *Crocus sieberi* etc. (see my spring proposals).

Art. 7. Within the same genus or "hybrid genus" the same variety (cultivar) name .. (-Art. 1 (h) of the Edit. Comm.).

Ex. ...

Note. Duplication of name among varieties (cultivars) .. (= Art. 1 (i) of E.C.).

Ex.

Art. 8. When it is desirable to designate polyploid .. (= Art. 3 (m) of E.C.).

Ex.

Chapter II. Rules for naming new varieties (cultivars).

Art. 9. From 1 January, 1959 onwards, a variety (cultivar) name which is given to an, until then, unnamed variety (cultivar) must be in accordance with the following rules.

(a) The name must be a vernacular or "fancy" name and markedly different from a botanical name or epithet of Latin form.

Ex. 'Pygmy' is allowed but not 'Pygmaeus'; likewise 'Prinz Handjery' but not 'Handjeryi'. Scientific generic names (such as, e.g., Rosa or Camellia) are not allowed as variety (cultivar) names for new varieties (cultivars) from that date.

Note. Variety (cultivar) names of Latin form properly published before 1 Jan. 1959 (must not be rejected because they are in Latin) (have to be retained although they have a Latin form).

Ex. *Tulipa x gesneriana* 'Carminae'; *Hibiscus syriacus* 'Totus Albus'; *Narcissus 'Actaea'* - all of them properly published before 1 January 1959 and thus to be retained.

Obs. When a cultivar was originally described in conformance with the International Code of Botanical Nomenclature as a *varietas* (botanical variety) or *forma*, its epithet must not be treated as being a variety (cultivar) name; if it is desirable to designate it also by a variety (cultivar) name, this must be formed in accordance with Art. 9 (a).

Ex. *Thuja orientalis* f. *elegantissima* (Gord.) Vos must not be transformed into *Th. orientalis* 'Elegantissima'. *Betula verrucosa* f. *dalecarlica*, which is known as wildgrowing in at least two clones, must not be called *B. verrucosa* 'Dalecarlica'; if it is desirable to give the single clone in cultivation a variety (cultivar) name, this must be formed as said in Art. 9 (a).

(b) The name must not be the common name of a genus or species.

Ex. Names as Plum 'Apricot' or Hyacinth 'Bluebell' must not be formed.

(c) The name must not consist of more than three words and should preferably consist of one or two words.

(d) The name must not be that of a country or state without an accompanying word.

Ex. ..

(e) The name must not be that of an originator or introducer of the variety (cultivar) without an accompanying word.

(f) The scientific or vernacular name of the genus .. (= Art. 3 c of E.C.)

(g) Single letters as the first part of a variety (cultivar) name are not allowed.

Ex. 'George Creelman' would be legitimate, but not 'G. Creelman'.

(g) Unless required .. (= Art. 3 j of E.C.)

Ex.

(h) Abbreviations for personal and geographical names .. (Art. 3 k of E.C.).

Ex. ..

(i) Numerals are not allowed .. (= Art. 3 f of E.C.).

Art. 10. When naming new varieties (cultivars) from 1 January 1959 onwards the following types of names should be avoided. The registration offices of the groups concerned are allowed to reject the acceptance of names not in accordance with these recommendations.

(a) Names which palpably exaggerate the merits ..

(b) Names which are not clearly distinctive but merely vaguely descriptive (etc. as in Art. 1 e of E.C.).

(c) Names very closely resembling such already existing in the same genus or hybrid genus although not being orthographic variants in the sense of Art. 7.

(d) Excessively long words and phrases .. (= Art. 1 g of E.C.)

(e) Names of politically conspicuous persons .. (= Art. 3 g of E.C.).

Some stray remarks.

Some, partly important, things seem to have been unintentionally dropped during the rearrangement of the Code. So for instance, there seems to be no mention of initial capital as necessary for all variety (cultivar) names, only the remark in connection with a variety (cultivar) name of Latin form (Art. 1 b) that "such a name" .. "must begin with a capital letter". The ex. *Thuja orientalis* 'Elegantissima' should be replaced by an unambiguous case, since, at least acc. to Rehder, the name *elegantissima* was originally given as a botanical designation - that is, just such a name as mentioned in Art. 1 (c). As to that art. (1c), I don't understand how it is intended to work - from 1 January 1959 no cultivar names in Latin form are allowed at all, but if they have before that date been properly published as such, they must be retained acc. to Art. 1 (b). I am very much opposed to the custom that has been followed during the last years especially within dendrology to "revert" botanical designations, validly published as var. or forma names, into cultivar names, not least from a botanical (taxonomical) point of view, since those taxonomical designations for e.g. *pendula*-, *laciniata*- and similar mutants are needed in pure taxonomy (as will be seen from my studies on lacinate leaved *Betula* and *Alnus* soon to be published) but, on the other hand, these names may include several, in other respects perhaps very dissimilar clones and variety (cultivar) names should only be given to single clones in these cases. For that reason I have tried to give a new wording of the Art. 1 (c) and have also put in an example from *Betula*, which I think will illustrate well the intention of the article. (But I am very much in doubt that it should be included at all).

The new arrangement of the Rules seems to be a real improvement, although I am somewhat in doubt whether it is really practical not to begin with the use of the term article until Section C. It is rather often necessary to give references to Section B from Sect. C, and these will be rather complicated as seen from some examples above. As to Section C, however, I cannot see that the Edit. Comm. have been very successful, since it comprises both the regulations already to be followed regarding typography, spelling, position and transfer of variety (cultivar) names, which should (together with some other things) be collected in a separate chapter. Then we would have all regulations for naming new varieties in one uninterrupted sequence (Chap. II).

As before, also the redraft now revised makes no clear distinction between rules and recommendations for the future. It is also quite impossible to see from the E.C. redraft what is meant to apply already to the state of to-day and what is intended to begin with 1 January 1959. I think it will be possible to arrange all these points in a simpler way and make a clear decision between rules and recommendations for the future. This is given above. I have also proposed a means by which it may be possible to have those recommendations followed; what I aim at is that the registration offices shall not register names they do not find in good agreement with these recommendations. As long as there is no such risk, and as long as we do not make clear statements about what is allowed and what not there seems to me to be very little meaning with any regulations at all for names of new cultivars.

Art. 2 (a), p. 5 - see under Footnote (3) to p. 2. The paeony name should be 'Festiva', not 'Festive'. - In art. 3, the plum 'Apricot' has been mentioned both in a and in b. The article 3 l was treated already under 1 g. Both these cases have been arranged in another way in my proposal.

Art. 4. Example *Syringa*. The original wording was clearer; in any case it is necessary not to italicize *Syringa* in the two first places!!

Recommendation 2, p. 8. Should be deleted. After 1 January 1959 it will be necessary to give a description with "sufficient particulars", and acc. to art. 7 a description or a reference to an earlier description is necessary already now for valid publication!

Art. 21. Insert in the text after the third word (cultivar).

Art. 23. (b). As I have pointed out before, the expression "in Latin form" is not adequate. What is important is if the name is given in form of a binominal - i.e. corresponding to a specific name -; then it is subject to the ICBN.

Art. 24 (b). Here should be added (in the ex.): The original clone 'Jalisco' should then be referred to as *Rh. (Jalisco) grox* 'Jalisco'. /This case seems to have been forgotten hitherto but must be mentioned./

Art. 26. Ex. *Viburnum x bodnantense* is given as *V. fragrans x V. grandiflorum*, and *Eucryphia intermedia* as *E. glutinosa x E. lucida*. In Art. 23, p. 11, a corresponding example is, however, written as *Camellia japonica x saluenensis*.

New article (or chapter) on Translations of the Code.

This important question has not been dealt with in the present Code or the redraft of the E.C. I think we must have some regulations about that thing- one of those to be discussed in London in November. The following is only a preliminary wording to be amended by the Committee.

In order to make the Code known among horticulturists, agriculturists and foresters in all countries, it is important to have it translated into various languages. Members of the commission representing countries outside the English speaking circle are authorized to make translations into their languages or to supervise such translations. Since the wording of the official English version of the Code does not, in many cases, correspond to linguistic custom in other languages, these authorized translators are allowed to make the necessary changes in formulating as well as in the choice of examples. As to translations into languages, not represented in the Commission, these cannot be considered authorized unless they have been supervised by the Commission or its editorial committee.

Antigua, Guatemala, 8 March 1968.

Ing. Hernan Fonseca Z.
Apartado 4411, Panama, R. de P.

Dear Hernan:

I have been waiting to answer your letter of last Dec 12 until I could see how things are lining up. In the first place, I hear that Jorge de Alba stopped the publication on your article in CEIBA and I believe primarily because he does not believe in upgrading native cattle with pure-blood bulls of standard dairy breeds, as we did at Zamorano. I believe he wants to develop better dairy cattle by selection of local cows and bulls, or something of that sort. At the same time, I do not feel that he has any right to oppose publication of your article in Hacienda or anywhere else. As I think I told you, he said that Carlos Herrero told him our records are not reliable, with which statement I do not agree. I think they are as good as can be had anywhere in tropical America.

As you know, Dr Furman has gone; a Mexican PhD, Dr Ortega, now is in charge of the animal husbandry department. Dr Krochmal, from Cornell, is in charge of Horticulture and the publication of Ceiba, but he has not yet turned out an issue.

About the título business, I will tell you just where I stand. I think Zamorano should remain a vocational school. I think we should pick-out 5 to 10 of our best graduates every year and send them to Florida, just as we sent you. Of these 5 to 10 we should the best go ahead for advanced degrees. I do not favor putting Zamorano on the University level because I do not think we can hope to have a big enough teaching staff of high quality or give all the academic work required for a University degree. The school is too small and can not grow indefinitely, and I do not want us to be a third class Facultad de Agronomia. I can not say just how things are going to develop at Zamorano but from all I hear I do not believe the Board of Trustees is going to put the school on the full university level. Dr Paddock obtained an opinion from the registrar of the Univ of Florida that our best graduates ought to be accepted at Gainesville as seniors and get the B S A in one year. This is certainly as far as I would like to see us go. And I hear kicks to the effect that if our boys only have one year at Gainesville, in order to get a B S degree they will have to take so many required subjects they wont have time for much agriculture. Again I say, I feel very strongly that one of our graduates with three years Vo Ag work will benefit tremendously by two years at Gainesville where he can get all sorts of courses in the special fields which most interest him. Just as you did.

Thanks for sending me the proyecto de ley. I don't care much for it. Too much politics; too theoretical. Why not just pick out good men without too much consideration of nationality, pay them good salaries, and put them to work? Why bother to say that if they hire a man who is not a panameño, a panameño has to be given a job in some other country?

ESCUELA AGRICOLA PANAMERICANA
Sincerely yours,

LEY NUMERO _____

(de de de 1960)

Por la cual se dictan disposiciones relativas a la prestación de Servicios Profesionales en Ciencias Agrícolas.

LA ASAMBLEA NACIONAL DE PANAMA

DECRETA:

ARTICULO 1º. - Para la prestación de Servicios Profesionales en Ciencias Agrícolas en el territorio de la República de Panamá, se requiere poseer certificado de idoneidad expedido de acuerdo con lo que estipula esta Ley.

Se consideran Ciencias Agrícolas las siguientes: Agronomía, Agrostología, Botánica Agrícola, Dasonomía, Edafología, Economía Agrícola, Educación Vocacional Agrícola, Entomología, Extensionismo Agrícola, Fitopatología, Fitogenética, Horticultura, Ingeniería Agrícola, Química Agrícola, Zoología Agrícola, Zootecnia y otras Ciencias que así sean declaradas por el Consejo Técnico Nacional de Agricultura, creado por esta misma Ley.

ARTICULO 2º. - Para obtener certificados de idoneidad para la prestación de tales servicios se requiere:

- a) Ser ciudadano panameño, o tener cónyuge panameño,
- o tener hijos panameños. En los dos últimos casos la persona debe tener visa de residencia en el país.

Se exceptúan de este acápite los profesionales extranjeros con visa de residente que hubieran estado ejerciendo la profesión con anterioridad a la aprobación de esta Ley, y que cumplan con las disposiciones que en esta se establecen.

En este artículo los Zamboranos
no podrían obtener el
certificado de idoneidad

- b) Haber recibido título de terminación de estudios extendido por una universidad nacional o extranjera de curriculum no menor de cuatro años (4), y cuya autoridad académica haya sido reconocida por la Universidad de Panamá. Además, debe haberse registrado el diploma en el Ministerio de Educación.
- c) Observar buena conducta pública y cumplir con la Constitución y las leyes de la República.

PARAGRAFO: Para los fines de esta Ley, no se reconocen los certificados de idoneidad expedidos a favor de profesionales al tenor de lo dispuesto por otras leyes.

ARTICULO 3. Tanto el Estado como las empresas privadas podrán contratar los servicios de profesionales extranjeros para fines específicos, siempre y cuando el Consejo Técnico Nacional de Agricultura certifique que no hay profesionales panameños idóneos y disponibles para prestar tales servicios.

Cuando sea necesario contratar los servicios de profesionales extranjeros la entidad oficial o privada elevará al Consejo Técnico Nacional de Agricultura, con la anticipación que establezca el reglamento interno de este, una solicitud indicando el personal que necesita, la condición del mismo y la justificación de esa necesidad, acompañando esta solicitud con copia del título de terminación de estudios y copia del curriculum vitae del técnico que desea contratar, para la aprobación de este organismo.

Todos los contratos de profesionales extranjeros no serán por un término mayor de dos (2) años. El contratante deberá facilitar los medios para que se adiestre un profesional panameño con certificado de idoneidad en el mismo campo, de modo que el nacional pueda sustituir al extranjero al finalizar el contrato. Cuando los contratos sean por un año o menos, el Consejo Técnico determinará si es necesario el adiestramiento de un profesional panameño.

PARAGRAFO "A". Cuando por las necesidades del servicio se desee prorrogar el término del contrato del profesional extranjero, el contratante estará en obligación de comprobar esta necesidad ante el Consejo Técnico, elevando una solicitud de prórroga. El Consejo Técnico Nacional de Agricultura aprobará o negará la solicitud de prórroga mencionada.

PARAGRAFO "B". El Consejo podrá en reciprocidad autorizar la prestación de servicios profesionales a nacionales de otros países en las mismas condiciones y número en que profesionales panameños presten servicios en esos países.

ARTICULO 4º.- Los extranjeros que estén amparados por convenios internacionales o que presten servicios profesionales a organismos internacionales de asistencia técnica en el territorio nacional podrán hacerlo, siempre y cuando el Consejo Técnico Nacional les extienda la autorización temporal correspondiente.

ARTICULO 5º.- El Consejo Técnico Nacional de Agricultura podrá amonestar en forma verbal o por escrito, o suspender temporal o indefinidamente los certificados de idoneidad o autorizaciones a los profesionales nacionales o extranjeros que encontrare culpable de:

- a) Engaño o soborno en la consecución del mismo certificado.
- b) Negligencia, incompetencia, o deshonestidad comprobados en el ejercicio de la profesión.
- c) Violación de la Constitución y las leyes de la República, inclusive las disposiciones de esta Ley y sus Reglamentos.
- d) Mala conducta pública.

ARTICULO 6º.- Créase para los fines de esta Ley un Consejo Técnico Nacional de Agricultura compuesto por cinco (5) miembros que durarán cinco (5) años en sus funciones. Cada miembro principal tendrá dos suplentes. El primer miembro y sus dos suplentes serán designados por el Ministerio de Agricultura, Comercio e Industrias; el segundo miembro y sus dos suplentes serán designados por la Universidad de Panamá y los otros tres y sus suplentes serán elegidos por la Sociedad Agrónoma-

Señan Ingenieros Agrónomos,
afiliados a los Sindicatos

mica de Panamá. Todos los miembros principales y suplentes serán profesionales idóneos de acuerdo con lo que estipula esta Ley, y deberán haber ejercido la profesión por lo menos cinco (5) años.

Los suplentes serán designados en su orden de primer y segundo suplente y actuarán en ausencia temporal o permanente del principal.

ARTICULO TRANSITORIO: Los cinco (5) primeros miembros y sus respectivos suplentes del Consejo Técnico Nacional de Agricultura serán declarados idóneos por el Organo Ejecutivo de acuerdo con lo que establece el Artículo 20. de esta Ley y serán designados así:

- a) El primer principal y sus suplentes por un período de cinco (5) años.
- b) El segundo y sus suplentes por un período de cuatro años (4).
- c) El tercero y sus suplentes por un período de tres (3) años.
- d) El cuarto y sus suplentes por un período de dos (2) años, y
- e) El quinto y sus suplentes por un período de un (1) año.

PARAGRAFO:

Una vez designados los miembros iniciales del Consejo Técnico y declarados idóneos por el Organo Ejecutivo, el Ministro de Agricultura, Comercio e Industrias los convocará a reunión y presidirá su instalación. En esta sesión se elegirá del seno del Consejo al Presidente y al Secretario, quienes durarán un año en sus funciones.

En un término no mayor de tres (3) meses después de su instalación, el Consejo deberá presentar un Reglamento Interno para la aprobación del Organo Ejecutivo.

ARTICULO 7s.-

Los gastos que ocasionen los sueldos del personal administrativo del Consejo, las dietas de sus miembros y los gastos de funcionamiento, serán imputados anualmente al presupuesto del Ministerio de Agricultura Comercio e Industrias.

ARTICULO 8º. - Son atribuciones del Consejo Técnico Nacional de Agricultura:

- a) Velar por el cumplimiento de esta Ley y sus Reglamentos.
- b) Expedir los certificados de idoneidad y las autorizaciones de que trata esta Ley y suspenderlos temporal o indefinidamente o cancelarlos a quienes hubieran incurrido en las causales establecidas en el Artículo 5º.
- c) Aplicar las sanciones que les corresponda a los infractores de las presentes disposiciones.
- d) Presentar al Organó Ejecutivo recomendaciones para la reglamentación de esta Ley y reglamentar a solicitud de los interesados, y con la aprobación del Organó Ejecutivo, la prestación de Servicios por profesionales de nivel académico diferente al Universitario, y a universitarios de curriculum de estudios menor de cuatro (4) años.
- e) Asesorar y cooperar con las autoridades y entidades públicas relacionadas con el desarrollo agropecuario del país.
- f) Determinar los puestos del Gobierno y de sus entidades autónomas y semi-autónomas que deben ser ocupados por profesionales idóneos, o por peritos
- Tamoraños o bachilleres agropecuarios reconocidos por el Consejo Técnico Nacional de Agricultura,
- g) Llevar un Libro de Registro completo de los profesionales que gocen del privilegio de la idoneidad que establece esta Ley, en orden numérico, de conformidad con la fecha de expedición de los certificados de idoneidad.
- h) Determinar si se han provisto los medios para el adiestramiento de los profesionales de que habla el Artículo 3º. de esta Ley.
- i) Someter a la aprobación del Organó Ejecutivo reglamentaciones de esta Ley que establezcan la estabilidad y escalas de sueldos de los profesionales agrícolas idóneos.
- j) Absorber las consultas y buscar soluciones a los problemas que encuentren los profesionales idóneos en el ejercicio de su profesión.

Se refiere al
Caso de Tamoraños

- k) Fomentar el adiestramiento superior de los profesionales idóneos, haciendo que las facilidades y becas que constantemente ofrecen los organismos internacionales se hagan disponibles a los profesionales idóneos que estén en condiciones de prestar mejores servicios a la Agricultura en los distintos menesteres.
- l) Estudiar y dar su aprobación o improbación a los programas de adiestramiento superior en que se vean envueltos los profesionales idóneos de acuerdo con el beneficio que ellos puedan aportar a los programas agrícolas. Los profesionales al servicio del estado estarán en obligación de solicitar al Consejo Técnico Nacional de Agricultura el permiso necesario para adiestrarse, de acuerdo con el Reglamento Interno del mismo, quien, en caso de aprobar la solicitud, ordenará la licencia necesaria y el pago del sueldo correspondiente mientras dure la licencia, que en ningún caso será mayor de un (1) año.

El Estado estará en la obligación de acatar las determinaciones que en ese sentido tome el Consejo Técnico Nacional de Agricultura.

- m) Cobrar a los interesados por la expedición de certificados de idoneidad, autorizaciones, consultas, análisis, etc., en la cantidad y forma que establezca el Reglamento Interno del Consejo Técnico Nacional de Agricultura, cumpliendo con el pago de los timbres e impuestos que establecen la Constitución y Leyes de la República.

ARTICULO 9º.- El Consejo Técnico Nacional de Agricultura se reunirá una vez al mes y cada uno de los miembros asistentes debengará una dieta de \$20.00 mensuales si se efectúa la reunión reglamentaria.

ARTICULO 10.- Los profesionales idóneos al Servicio del Estado o de empresas privadas no podrán ser destituidos de sus cargos sino por razones de incompetencia, deshonestidad o mala conducta. En cada caso particular el Consejo Técnico Nacional de Agricultura hará las investigaciones necesarias para establecer

la veracidad de los cargos, oyendo ambas partes. El Consejo Técnico decidirá sobre la destitución o continuación del inculcado, quedando el Estado o empresa privada en obligación de acatar la decisión del Consejo Técnico Nacional de Agricultura.

ARTICULO 11s. Toda persona natural o jurídica, empresas privadas, etc., establecidas en distritos cuya población sea mayor de 20,000 habitantes que se dediquen a la fabricación, preparación o importación para la venta y suministro al público de materiales y equipo para la producción agropecuaria, o a ofrecer consejos profesionales sobre las Ciencias Agrícolas establecidas en esta Ley, deberán inscribirse en un Libro de Registro que llevará el Consejo Técnico. Además, entre sus empleados deberá contar con personal con certificado de idoneidad para tales menesteres, salvo el caso en que el Consejo Técnico Nacional de Agricultura decida que solo es necesario que estas empresas cuenten con empleados con título de Perito o Bachiller agropecuario o su equivalente. El Consejo Técnico Nacional de Agricultura velará porque se cumplan estas disposiciones.

ARTICULO 12o. El procedimiento para la denuncia sobre las infracciones de esta Ley y las penas correspondientes, será establecido por el Consejo Técnico Nacional de Agricultura, teniendo en cuenta el espíritu y la letra de estas disposiciones.

Presentado a la Consideración de la Asamblea Nacional por los Honorables Diputados

(fdo.) CARLOS DELVALLE

(fdo.) RAFAEL GRAJALES R.

(fdo.) ABRAHAM PRETTO

(fdo.) JACINTO LOPEZ Y LEON

PRESENTADO : Noviembre 15 de 1960.

COMISION : Asuntos Económicos.

TERMINO : Cinco días.

PLIEGO DE MOTIVOS

AL

ANTEPROYECTO DE LEY QUE

REGULA EL EJERCICIO DE LA PROFESION EN CIENCIAS AGRICOLAS

1. La agricultura es un factor primordial en el desarrollo económico del país, y es necesario legislar, no solamente para proteger la producción agropecuaria en sí, sino también al personal técnico profesional que con su orientación contribuye al logro de esa producción.

11. A pesar de que la agricultura provee ocupación a más de la mitad de la población, y genera del 25 al 30 por ciento del producto interno bruto, pocos son los estudiantes que escogen una carrera profesional en las Ciencias Agrícolas por carecer estas de suficientes atractivos tales como estabilidad y remuneración. Existen otras profesiones mejor remuneradas y más consideradas, que ya han sido reglamentadas por medio de una Ley, como la Medicina, la Farmacia, la Veterinaria, la Ingeniería y Arquitectura, etc., que atraen más a nuestros estudiantes deseados de adquirir una profesión. Por falta de reglamentos que ofrezcan garantías al técnico agrícola en sus actividades profesionales, algunos ya han comenzado a dedicarse a otras actividades ajenas a su preparación, lo que constituye una pérdida para el desarrollo agrícola nacional.

111. Para el progreso agrícola del país es necesario reglamentar la prestación de servicios profesionales en las Ciencias Agrícolas para que estos servicios constituyan, en verdad, una garantía para el productor, para el consumidor, y para el mejoramiento de la economía nacional. Como resultado de esta acción, se podría garantizar a los agricultores y ganaderos que los materiales y equipos que ellos obtienen en los mercados locales, para la producción agropecuaria, son realmente los que recomienda la técnica. Constantemente se invierten grandes sumas de dinero en materiales y equipo innecesarios y en ocasiones dañinos, en perjuicio de los costos de producción, y en aumento de la pérdida de divisas. El productor necesita tener confianza de que el vendedor le ofrece el producto adecuado, porque es competente para ello, o porque está bajo órdenes de personas competentes.

Críticas al anteproyecto

La Sociedad Panameña de Agrónomos bajo ningún punto de vista debe permitir que dicho proyecto de ley sea aprobado, al menos que sufra sustanciales reformas tales como que la SPA tenga igual representación en el CTNA, que pue da tener la sociedad agronómica de Panamá.

El CTNA puede velar porque las posiciones en el gobierno sean ocupadas por personas de solvencia moral y profesional, pero es atentatorio que el CTNA meta las narices en las empresas privadas que son soberanamente libres para escoger los profesionales que necesiten para sus propósitos de explotación y buscarlos donde mejor les convenga; máxime si son empresas nacionales privadas o de panameños, por lo tanto el artículo 3 debe ser sustancialmente reformado. Resulta ridículo que el gobierno tenga que pedirle aprobación al CTNA para aceptar los servicios de técnicos de los organismos internacionales de cooperación técnica, máxime cuando est-os técnicos van a los países que lo solicitan sin cobrarles un centavo. Por lo tanto el artículo 4 debe reformarse en el sentido que el gobierno utilice el CTNA como asesor cuando solicita profesionales de estos organismos, y está bien que se limiten solo a asesorar y que sean personas capacitadas.

El inciso f del artículo 8 es atentatorio, pues resulta ridículo que el gobierno esté sometido a las determinaciones del CTNA para designar las posiciones en las entidades públicas.

El artículo II también es atentatorio; porque nadie como empresario vería de buen agrado que el CTNA le viniera a decir cuantos técnicos necesita y cuantos debe contratar para su empresa y cual debe ser la calidad de los mismos. Puede ser razonable que el CTNA lleve un registro de las empresas y que si las empresas solicitan consejos o ayudas en sus planificaciones el consejo técnico esté a ayudarle en forma que le sea más conveniente a la empresa y a los profesionales, pero nada de imposiciones porque ello iría contra la libre iniciativa individual y la libertad de empresas.

El artículo 6 debe ser reformado sustancialmente dándole más liberalidad y menos monopolismo; y en este caso la Sociedad Panameña de Agrónomos tiene que tener igual representación en el CTNA que la Sociedad Agronómica de Panamá; igualmente hay que acordarse que tenemos bastante agricultores y ganaderos que también serán afectados en algun grado por la aplicación de esta ley y porque no tomarlos en cuenta en este cuerpo que va a tener mucha responsabilidad por el desarrollo agropecuario del país. Es mi concepto tener representado en el CTNA a los agricultores y a los ganaderos aunque ellos no sean técnicos, los intereses de ellos lo justifica.

CTNA: Consejo Técnico Nacional de Agricultura
La ley debe ser más liberal y menos monopolista

Pedro Nel Lezcano
Secretario General, SPA

Nda enviada a la Asamblea por la SPA.

SPA = Asociación formada por Zamoranos.

*CTNA = Consejo Técnico Nacional de Agricultura
a que se refiere esta ley.*

Guatemala, 26 de Noviembre de 1,959.-

Señor Don.

J, Antonio García R.

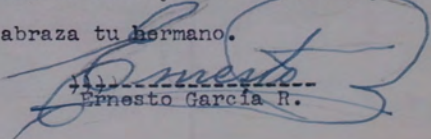
Antigua.

Mi estimado hermano Antonio!

Por este medio me doy el gusto de saludarte deseando que, tanto tú como tu familia no tengan mayor novedad.-

Con respecto a lo que me dices que hay un Señor que está interesado en comprar el sitio y que te diga cual es el ultimo precio que quiero por el. ya la vez pasada te dije que yo quiero por el Q.2500. pero como tú dices que si no hago una rebaja porque el Señor que lo quiere comprar te ofrece las cobachas y tratandose de eso, yo creo que si es a si te lo puedo poner en la cantidad de Q.2.200. esto desde luego sería el ultimo precio pues tu sabes que sale a un quetzal la vara más el agua y cañería. Bueno pues yo te agradeceré que de lo que piense el Señor me avises.--

Te ruego saludar a los de esta tu casa y mientras me doy el gusto de saludarte personalmente te abraza tu hermano.


Ernesto García R.

DUFF and M. E. GILFOND
temptations in books
1722-19th STREET N. W.
WASHINGTON 9, D. C.

Dear Dr. Popenoe:

May 21, 1959

Imagine, knocking at your door in Honduras, for a clue to a copy of Manual of Tropical and Subtropical Fruits! We hope you will forgive us, Sir. We would not dream of such an intrusion were the book not urgently needed by a large University Library whose book-searchers we are--and had we not already knocked at the door of every book-dealer who might have a copy, to no avail.

Sometimes, we have found, that an author will come up with a clue to a copy when all other avenues have failed. He knows of someone whose copy is gathering dust when it could be put into active service or a copy he gave away has "come home" again. Can you, Sir, lead us to a copy for which we would pay "anything less than a million dollars"; fill the Library's urgent need; and "make it up" to you by tracking down an elusive book for you one day? In other words will Dr. Popenoe become Dr. Watson in our game of Sherlock Holmes for the Manual?

Very sincerely yours,

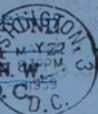
Duff Gilfond
(Mrs. M. E.)

DUFF and M. E. GILSON

temptations in books

1722-19th STREET, N.W.

WASHINGTON 9, D.C.



USE ZONE

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DR. WILSON POPEOE

APARTADO 93

TEGUCIGALPA

HONDURAS

CENTRAL AMERICA

AIR LETTER • AÉROGRAMME • PAR AVION



Pica 20 de Diciembre de 1970.-

Doctor

Wilson Popenoe.-

Director Emérito de la Escuela Agrícola Panamericana.-

Antigua Guatemala C.A.-

Distinguido Sr.:

En la Revista de Agricultura "La Hacienda" del mes de Julio del pte. año, sale un artículo suyo en el cual se expresa que es posible que ciertas variedades de Manzanos, produzcan en zonas tropicales.- He leído su artículo con mucho interés y me dirijo a Ud. para consultarle si puede producir en Pica, la variedad que se ha adaptado bien en el Perú: me refiero a la Winter Banana.- Las condiciones climáticas y de terreno son: Pica está situado a 100 kilómetros hacia el interior del puerto de Iquique; vale decir en pleno desierto.- Está a 1.300. metros de altura sobre el nivel del Mar.- Tenemos 360 días con sol durante los 365 del año.- Casi nunca llueve.- Los terrenos son arenosos, propios de desierto.- Tenemos agua de muy buena calidad: totalmente potable.- Casi nunca caen heladas.- La temperatura mínima en esta zona es de 40 C. y la máxima alrededor de 300 C. - Las neblinas de la Costa llegan muy pocas veces durante el año.- Los vientos son moderados, predominando los del Sur - Oeste durante el día y los del Este durante la noche.- En Pica se produce en excelentes condiciones: El limón la naranja, el Mango, la Guayaba, el Palto y el Granado.- Ahora que las plantaciones de Cítricos se encuentran atacados por la "Palomilla Blanca", me gustaría plantar Manzanos, para hacer una experiencia.- En consecuencia le ruego que Ud. me aconseje y me diga donde puedo comprar unas 50 plantas de la "Winter Banana".- Agradeciéndole de antemano, le saluda muy

atte. su S.S.

Italo De Gregori Torre.-

Provincia Tarapacá.- P I C A.-

República de Chile.-

[Italo de Gregori Torre]

Pica 7 de Junio de 1971.-

Ref.: Consulta por Viveros de Árboles de Mango.-

Doctor

Wilson Popenoe.-

Director Emérito de la Esc. Agr. Panamericana.-

Antigua Guatemala C.A.

Estimado Sr.:

Acuso recibo de su atta. de fecha 3 de Mayo.- Muchas gracias.

Ahora necesito saber las direcciones de unos dos Viveros donde vendan plantas de Mango injertadas de buena calidad.

Yo necesito comprar unas 200 plantitas, para reponer los Naranjos y Limoneros que se me han secado como consecuencia del ataque continuado de la "Palomilla Blanca".-

También quisiera que Ud. me recomendara algún Libro que trate sobre el cultivo de este frutal.-

En Pica se produce muy bien el Mango.- Dá 2 veces al año, ya que nosotros tenemos sol todo el año y nó caen heladas.

Todos los árboles que hay aquí son muy grandes y frondosos y muy productivos.- Su fruta muy dulce y aromática.-

Quisiera saber si con las ramas bajas del árbol, pueden hacerse Mugrones, para obtener nuevas plantas.- En caso afirmativo, ruégole explicarme el método, pues aquí yo he hecho y nó echan raíces.-

Ud talvez piense que si tenemos árboles tan productivos, porqué no obtenemos nuevos arbolitos plantando la Semilla del fruto.- Resulta que aquí nadie sabe injertar y además como he leído en la Revista "La Hacienda" que en Centro América venden plantas que empiezan a producir a los 3 - 0-5 años, uno se entusiasma con el fin de ganar tiempo y ver luego produciendo las nuevas plantaciones.- Los árboles de Semilla sin injertar, aquí no empiezan a producir nunca antes de los 10 años, pues es un árbol de desarrollo muy lento, por lo menos la variedad que tenemos nosotros y que fué la que trajeron los Españoles, durante la conquista de Chile.- Aquí todos los árboles que están en plena producción, tienen más de Docientos años y también más de 300.- En espera de su respuesta, le saluda muy atte. su S.S.

Estilo De Pica



Nº X 2855470

REG. Nº 2855572

QUINQUENIO
(de 1938 a 1942)



Por Q 100.⁰⁰

Por el presente hago constar que vendo al Sr Don Humberto Garavito, un cuadro antiguo de mi propiedad que representa la imagen de San Francisco de Assis.

firmado, Villalpando. (f). y para seguridad del interesado hago constar que por valor de cien quetzales queda vendido dicho cuadro en fecha 28 de agosto de 1940.

W. Gómez Córdova

En esta fecha, he vendido al Sr. Dr. Wilson Popenoe, el cuadro de "San Francisco en oración" del pintor Villalpando, debidamente arreglado y con marco tallado dorado. Es la misma pintura citada arriba. Por la cantidad de Q.150. Ciento cincuenta Quetz.

Guatemala, Sept. 5 de 1940.

H. Garavito

October 7, 1965

Dear Dr Popenoe.

Bob has found another copy of *The House in Antigua* and I am mailing it to you with our good wishes.

We have recently returned from a Sierra Club hiking trip, crossing the Sierra from west to east just north of Mt. Whitney. I found it extremely strenuous, especially since we had considerable rain and the streams & rivers became full and rushing & crossing them scared me to death. However there were many interesting people on the trip and that made it all worth while. One of them was a San Francisco architect who was extremely well informed on architecture & history of places like Temeala and Peru, & we enjoyed talking to him & hearing him speak at a conference program.

We are longing to visit Guatemala again so we are thinking of planning another trip down there in February or March. We shall hope you'll be there. Your kindness to us was the highlight of our last visit there. We often look at our slides of Antigua - and show them to groups whenever we're asked - and always enjoy re-living the trip.

With all good wishes from us both -

Sincerely,
Mary Gash

Mrs Robert Gask
2627 Piedmont Ave
Berkeley Calif
USA



Dr. Wilson Popenoe
Calle de la Nobliza #2
Antigua Guatemala
G.A.

AÉROGRAMME • PAR AVION



Apartado 48 (49)

Maracay, 27 de abril de 1.960

Venezuela

Ciudadano
Dr. Wilson Popenoe
Guatemala.-

Estimado Doctor:

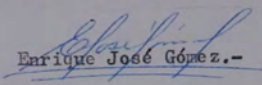
Con mi consideración y respetos pláceme dirigirme a Ud. en una nueva oportunidad a objeto de ratificarle mi gran deseo para llevar a efecto el curso sobre Fruticultura, del cual le manifesté mi anhelo por realizarlo, en su visita a esta Escuela.

La razón que me impidió no efectuar el curso debiose al compromiso ya contraído con anterioridad ante el Ministerio de Agricultura, en lo que respecta a mi labor como Profesor, ya que el cupo de alumnos fué aumentado y la falta de personal docente en esta rama es escaso en nuestro país, y tuve que desistir de tal propósito.

Actualmente encontrándome en disposición y pudiendo gestionar ante el despacho respectivo los trámites para la consecución del curso respectivo en ese país, acudo a Ud. para lograr por intermedio suyo la colaboración necesaria. Hablando con el Dr. Diego Zerpa, en días pasados sobre el particular, logré saber que tenía la disposición de escribirle a Ud. y hacerle referencia en cuanto a mis aspiraciones, y obtener datos concretos respecto al curso y demás fines consiguientes en la Escuela Experimental de ese país.

Al despedirme de Ud. permítome presentarle una vez más mis saludos y de antemano significole mis gracias anticipadas por la colaboración que se digne prestarle a mi solicitud.

De Ud. ss y amigo.


Enrique José Gómez.-

P.D. Agradézco de serle posible enviarme una constancia de que haré el curso, indicando el Instituto y lugar respectivo.-

Maracay. 21 de junio de 1.960

Sr. Dr.
Wilson Popenoe
Antigua Guatemala.-

Apreciado Dr.

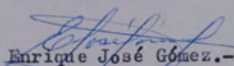
Pláceme dirigirle la presente con el fin de dar contestación a su apreciable carta, la cual esperaba desde hace mucho tiempo. En vista de la imposibilidad de realizar mi curso a pesar de los esfuerzos realizados por mi y sin lograr nada en concreto, he procedido a dirigirme a su sobrino el Dr. Popenoe, con el fin de solicitar los informes pertinentes al curso.

Con respecto a la beca le diré que no tengo problemas, porque ya la tengo consiga y lo único que me faltaría sería la constancia del Instituto donde realizaré el curso, y el tiempo de duración que estipulen los Jefes de la Estación.

Dr. lo que le voy a agradecer es que, Ud se dirija a esa Dependencia por intermedio de su sobrino, para ver si es posible hacer una pasantía de 6 meses, haciéndole mención de que soy Perito Agropecuario y actual Profesor de la Escuela Práctica de Agricultura; y si hay una respuesta satisfactoria, que me haga el favor de expedirme una carta donde se haga constar que voy a esa Estación a realizar un cursillo.

Dr. espero una vez más se interese en mi asunto y mientras espero su respuesta satisfactoria, significole mis cumplidas gracias por tantas molestias que le he causado.

Atentamente.-


Enrique José Gómez.-

Direcc:
Escuela Práctica de Agricultura
Apartado 49-Maracay-Venezuela.-

Quito, a 9 de Abril de 1.965

Señor
Wilson Popenoe
La Antigua
Guatemala.-

Muy distinguido señor:

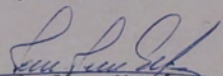
En vista que el suscrito, Egresado de la Facultad de Ingeniería Agronómica del Ecuador, necesito realizar la Tesis de Grado que versará sobre el tema: UTILIZACION DE CUATRO SISTEMAS DE INJERTACION DE AGUACATE, BAJO CONDICIONES DE SOL Y SOMBRA" (en macetas plásticas), debo indicarle también que los sistemas que estoy probando son: - DE ESCUDETE, DE ANCHAPE, DE PUA E INGLES; mucho agradeceré se sirva informarme sobre trabajos y más experiencias que tengan a este respecto, que lo considero de aporte muy valioso para mi trabajo.

Entre los puntos que requiere de su información - son los siguientes:

- Clases de injertación utilizados en aguacate y cuáles recomienda ?
- Si recomendaría hacer injertaciones bajo cubierta (sombra) ?
- Si recomendarían injertar en el vivero, en el suelo o en plantas en macetas, debido el trasplante ?
- Qué porcentajes de plantas se mueren debido a los trasplantes ?
- A que edad del patrón es más conveniente hacer el injerto ?
- Sobre cuáles especies han realizado la injertación ?
- Si recomiendan hacer hacer injertaciones de mesa ?
- Si en experimentos de injertaciones con diversos sistemas han obtenido resultados concluyentes ?
- Si han utilizado abonos químicos, en qué cantidad, cuáles y de ser posible indicando resultados.

Por la atención que se sirva dispensar a éste mi pedido, anticipo mis más sinceros agradecimientos.

Muy atentamente,


Gonzalo Gomez Martinez

Con dirección postal: O'Leary N° 908 - Quito-Ecuador.

February 2, 1967

Dear Doctor Pop:

What part of the world are you observing now? The mysterious somnolence of Antigua, the mad political climate of California or perhaps you have at last gotten into the mountains of Bolivia and are busy digging tin.

Some fragrant and saporoso Espresso Listo found its way into my kitchen some weeks back and I eventually ferreted out that you were responsible. Mille Gracias - you remembered! We have enjoyed every bit of it and I remembered your instructions to simultaneously pour the hot milk and the strong essence together. Formidable!

The Miami Herald ran a big full page color spread and article on Guatemala last Sunday. We immersed ourselves in nostalgia. Are you perhaps sitting on that long bench in your patio with great botanical books spread all around you and the February sun warm at noonday? No, you're not - you're striding on those long legs through some finca figuring out a way to grow carambolas on a sapodilla tree.

We are bereft of ~~Latin~~ Latin American student guests and with our oldest child away at school, the family seems too small. My consolations are these green and gold days of winter with the leaves making patterns of the sunlight and the coconut palms constantly talking to each other in low, ladylike tones.

We think of you often and hope you are well and happy and doing exciting things. I have not seen the Senora Isabella since you were here and must mend my fences. She is the sharpest cookie I know. Tim becomes 45 tomorrow and I tell him he is at the peak of his productivity and manhood - to say nothing of grace and beauty! So you see I am a good wife.

Much love to you always, dear Wilson.

Affectionately,

Tileen (Hatten)

E. S. Hatton
797 NW 9
Homestead, Fla. 33030
USA

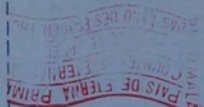


Dr. Wilson Pogorec
Antigua
Guatemala
C. A.

AÉROGRAMME • PAR AVION

FIRST FOLD

SECOND FOLD



June 6, 1967

Dear Wilson:

What a lovely surprise first to get your letter and then, in record time to get your package! We are delighted with the skirts, Debbie to the contrary notwithstanding, and ah the coffee! I wish I could thank Don Chice in person - has he done any marketing of the product in Miami?

You underestimate the efficiency of the Guatemalan postal service. Here you are talking about 4th of July and it's barely past 4th of June! We are a busy household with one girl graduating from High School, one from Junior High, one from Elementary and our oldest working in New York during her summer vacation, and my ten year old niece living with us for 3 months.

Is it too much to hope we will see you in Panama? I hope to go to the Caribbean Section meetings with Tim in July - we had hoped to proceed on to a week in ~~Barro Colorado~~ Colombia where our girls have spent so much time and where we have so many good Colombian friends, but alas, Tim is an Army Reservist and his summer training starts the very day our trip ends, so he will fly in from Panama and fly out to Georgia. We will hold our breath that the world situation does not worsen, although I keep telling him nobody wants old, fat colonels. The unfortunate part is that there is a need for pilots and instructors, both of which are his specialty.

But all this is I am sure very far from the quiet streets of Antigua. The Miami Herald has some shoot-em-up stories occasionally about your people down there, but it seems they must be taken with a grain of salt.

Incidentally, your bottle of coffee, wrapped so well in Homestead plastic, as you call it, came through beautifully. The skirts are precious and lightweight enough ~~for~~ in color and weight, for our unspeakable summer climate that lasts ~~through~~ from May through October. The girls are individualists enough (in some ways) to be very pleased to have something so foreign and gay, and I cannot say how I appreciate your remembering your promises when you must have many demands upon you.

If you should cease to wear a Cordoba's, because of the supposition that dome might think you posing, it would be unthinkable. I would say first of all you are a pragmatist; what ~~marks~~ proves practical is what one practices, or one is a dope.

You know we will love seeing you if your trip to Boston includes a stop here. I feel most inadequate to do anything exciting or even interesting for you - the heat enervates me like water squeezed from a sponge. I would dearly love to hear what the Trustees of Escuela Agricola Panamericana say in Boston - and what are they doing in Boston anyway? Is Boston a city to your liking? I had a brother living there whom I visited briefly and it seemed a place I would like to return to.

Tim is in Washington (Beltsville actually) at a week's conference of USDA people. He is enjoying the change from our 90 degree daily climate, but the rain in the afternoon is making the grass grow so high, he will have a heavy mowing schedule when he returns. Wilson, dear, again, a thousand thanks for so many unforgettable kindnesses.

Affectionately,

Eileen

Mrs. T. T. Hatton
797 NW 9th Ct.
Homestead, Fla.
33030, U.S.A.



Dr. Wilson Popenoe
Antigua
Guatemala
Central America

AÉROGRAMME • PAR AVION



18. Nov. 71

Dear Wilson,

It was a great pleasure for us to find a separate leaf from you enclosed to the last letter of Liesel. We know the lot of your extended correspondence and estimate in a high degree you thought of us. Many thanks for these personal greetings.

As to our health we are well. But wie grow to get tired earlier. Meanwhile it is better for us to have a job, the days filled up - and connexion with other people. The impressions occupy oneself and are subjects for talking in the evening.

Summer was blessed in all Western Europe. Except two or three cool weeks with rain in June we had five months of ideal weather for holidays. The wine will become a century-wine, so ripe and with a proportion of natural sugar that we have to let back the car and walk by foot. Each glass will be a bachanal. But we think the prices will stop this love to the alcohol.

Fruits are so abundant, that peasants don't know what to do. This very day, the roses are blowing in our garden - in the midst of November! But agriculture needs the rain urgently now. The artificial lakes are empty too. The level of the lake of Constance lies about one yard under normal, navigation on Rhine, Weser and Neckar is endangered. In the netherlands people has to buy drinking-water, packed in Norway. But who liked to sit on terrace had his pleasure in these months and could spare the chairs in the house. So much ozon we never inhaled!

Marga wrote in her last letter that we had a fine trip through the country. In sunshine, autumn with its colouring was especially pretty - and for long because no wind or rain let early fall the leafs. In Alsace we took along some wine (for guests, especially from the other side of the Atlantic!) And in Bavaria we took care for increasing the consumption of beer.

Culmination point of our tour was Augsburg, the mediaeval free town of the Reich. There is the old "Fuggerei"; ~~IXX~~ it was partially destroyed and rebuilt about 20 years ago in genuine style. It is the oldest work-settlement of the world, erected 1619. There were dwelling several hundred families - and to-day again. The

low houses with its staircase-gables (??), builded in long rows, have several yards, springs and fountains, two chapels. A wall surrounds the whole complex and makes it a separate quarter. In the palace of Fugger, in the main-street of Augsburg, we dined in the cellar-restaurant with old gothic arches. In the Schätzler-Palais, with a great hall in rokoko-style, we visited the galerie.

Some days before, we climbed up one of the lower front-hills at the lake of Constance, near Bregenz in Austria, and had a wonderful panorama with the bavarian, austrian and Swizzerland-mountains. Certainly, our hill with ~~XXX~~ its about 650 yards above the level of the lake, was no "Fuego"!

This will also interest you: after five years, our pear-tree produced the first juicy pears, about 40. Only the apple-tree still puts us to the rack.

Now it will be time to think of advent - and than, it is not far off Christmas. With my daily 2 x 20 miles the discomfort because of snow and ice increases - but all will pass by.

Have I to tell you, that we speak again and again of our memories? All is still in mind and in the ear. Only two days ago we enjoyed again our about 120 slides. - After a powerful gulp we noisy clear the throat - in memoriam - full of sympathie to you. And when we see something pretty or antique or sublime, we say that it would like you too.

Now, no more of this horrible english. But cordial greetings and good wishes to Marion and Hugh we want to join to. The best thoughts however to you and Liesel

yours sincerely

Nido + Marga
[Henrich?]

Greetings to Concha and Pancha. We are glad that Concha thought of us, when Liesel wrote her

Last letter, which arrived yesterday.

Dear Wilson,

Fast ein Jahr seit unserem Wieder-
sehen ist vergangen - viele schöne
Erinnerungen sind geblieben. Und
ein Datum liegt uns noch im Ohr:
Ihr Geburtstag.

Ein neuer kleiner Lebensabschnitt
liegt wieder vor Ihnen. Mit zu-
nehmender Zahl steigert sich die
Erfahrung, das Schöne zu genießen
und streifen Widrigkeiten mit der
gelassenen Reife der Weisheit zu be-
ggnen.

Fortuna möge im nächsten Lebens-
jahr aus ihrem Füllhorn nur

Angenehmes über Sie ausschütten,
sodafs Sie übers Jahr sagen hätten:
"wie schön ist doch das Leben".

Neue beglückende Erlebnisse und Be-
friedigung über das selbst Geschaffene
wünschen wir Ihnen ebenso wie eine
nicht zu erschütternde Konstitution.
Beginnen Sie jeden Morgen mit
Ihrem ausstrahlenden Lachen - dann
reißt sich Tag an Tag in innerer
Fröhlichkeit - mens sana!

Im herzlichsten Zuneigung
Ihr Ardo + Marga

Herzliche Grüsse von uns Beiden
an die sicher müde Pflegerin
„Kleiner Lise, die Grün aus dem Garten“.



27th of January 1972

Dear Wilson,

it's no exaggeration to tell you that - in the past two weeks - we were with you nearly every day with our thoughts. We know, that the operation which grew necessary, was painful and not without some bloodshed too. Several days afterwards, it still aches but gradually the disagreeable sensibility will cease. We wish this moment of relief will be reached now.

We hope too, all passed under good circumstances and the unhindered "running through" is guaranteed. Life will soon gain his attraction ~~again~~. All our wishes for a good rinsing (but do not begin with Whisky!!).

After bed-time, the radius of actions is still small when you are feeling every step. It's a large distance from Site to the office. The intermediate stations: the little moorish garden of flowers, comedor and a rocking-chair in the patio may be soon annulled again. You will be amazed, how quickly your state will grow better when the days become tedious and the call of the avocados penetrates in your ears.

The main point: your heart was strong enough and took part. So it will accelerate too your recovery - certainly with some patience.

We congratulate you that all ~~has~~ gone over and the silent doubts made place to joy and pleasure of life. Enjoy it (with prudence!) and think every day of your plans you still intend and of what the world around you still expects from you.

Many, many greetings and good wishes by all our hearts

always your affectionates

Uns amigos Aldo y Nurga

To fosterer Alice an especial "fine salute". The enduring of the crisis are the highest thanks for care and uneasiness.

*Liebe Lisel! ich hoffe das Schlimmste ist
hinter überstanden. Bleibst deine Nurga.*





26 March 1970

Dear Dr. Popenoe,

Greetings.

You may recollect that Charles Wright and I stayed a few days at Zamorano as your guests some years ago — a visit which we enjoyed greatly. Do you remember the rice birds, complete with heads, which we ate one evening?

Charles now lives permanently in B. H. He has a large cattle farm — which he hopes to sell so that he may concentrate his activities on a citrus and ornamentals nursery which he has established (The Rio Grande Plant Nurseries. P.O. Box 23, Punta Gorda, Toledo District, Belize, British Honduras.) My wife, Iris, and I plan to spend 2 months with him next mid Jan — mid March, with possibly a short visit to S. Yucatan.

My book Vegetables in S.E. Asia is now in page proof in Hong Kong and I am busy with my book on Tropical & Subtropical Flowering Vines. This subject has interested me since I first went to Hong Kong in 1928 and although I lost many drawings and notes in the war I have now about 160 ink drawings and some paintings. I have lived 20 years in HK, 7 in Trinidad, 2 in Nepal and have visited many countries eg Thailand, New Guinea and about 1 year in Africa. Friends in many countries are sending me seeds and I have this year already sown in my greenhouse of Convolvulaceae alone 20 species from 6 countries.

Now, in preparation for our visit to B. H. in 1971 I have been studying The Flora of the Lacatilla Valley — borrowed from the Linnean Society library — for the Lacatilla Experiment Station in the Tela valley is about the same latitude as Punta Gorda. I note, *inter alia*, that there are some lovely climbers in the Valley probably not in cultivation eg on page 328 *Ipomoea splendor-sylvae* and *I. wilsoni*.

Can you tell me whether there

Is any botanist at your former
Experiment Station who might be
able to send ~~some~~ seeds of a few
rare ornamental climbing plants
either to me or to Charles Wright
who could grow them against
my arrival next year?

With kind regards

Yours Sincerely
Geoffrey Herklotz

TO OPEN SLIT HERE

SENDER'S NAME AND ADDRESS

G. A. C. HERKLOTS
VANNERS
CHOBHAM
WOKING
England

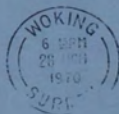
AN AIR LETTER SHOULD
NOT CONTAIN ANY ENCLOSURE;
IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL

SECOND FOLD HERE

BY AIR MAIL
AIR LETTER

PAR AVION AEROGamme

Personal



Dr Wilson Popenoe
David Fairchild Tropical Garden
Miami
Florida
U.S.A.

Magdalena Jan 30-74

Dr Ed Mrs Wilson Popeiro
Cassa Del Oidor
Antigua Guatemala

Dear Folks: -

We are gradually heading your way - and thought it might help if we gave you an approximate arrival date. The way it looks now, but changes can be, and have been made - we will be in Guatemala on Feb 20 and 21. We are planning on being in Antigua on the 20th of February.

Have no definite directions how to find your place - and if you think necessary - would you mail a letter to us at Antigua % General Delivery and we can call for it on our arrival.

We are looking forward to meeting you folks, and delivering a package from Mrs. Jardine.

Sincerely
Bill and Hazel Holthaus

We will probably drive - and our car is

1967 Chrysler - Blue - 4 Door Sedan 702-BTO
Calif.

6 July [1953]

3338 Jensen Dr
SD 17

Dearest Mom & Dad,

Will you ever forgive such a delay in writing, this letter is so long overdue, but you have never been out of our thoughts. We're so glad to hear that all is progressing normally now in Zamorano, that Dad is over his bronchitis and that Mom arrived home safely in spite of what must have been a tiresome trip with such a delay in Salvador.

Mom, I can't tell you how very much we enjoyed your visit, and we have such wonderful reminders now of the good time we had together. We were simply thrilled with the wine glasses and have used them constantly since they arrived. Thank you so much for them, it was such a thoughtful and kind thing to do and we will always think of you when we use them. Also, our silver mugs are present at every meal - so handsome on the table, and how we love them! All the things you have given us hold such an important spot in our home and we treasure them always.

Dad we loved your letters as always and they make us so happy. I'm really sorry not to have answered sooner but hope now to make up for lost time.

Mom - imagine! It looks like your "guess" as to my condition was quite true! I do believe you must be psychic for you are the only one who even suspected I might be pregnant, including ourselves! I'm waiting outside the doctor's office now. I came in two weeks ago because I was feeling so terrible and he said it was too early to tell for sure, but ought to be able to verify it for sure. I've been feeling so sick, all day, and he gave me some Dramamine which helps but makes me so sleepy. Consequently it has been quite an effort to keep going on my job and keep the house up, too, as well as keeping up with the social functions on the weekends which Dick's job demands. But they say this feeling is quite normal for the first three months and after that I think it will be much easier. For the reasons above, I would have preferred to wait a little longer ~~but~~ and yet I can't help feeling excited at the very prospect! Dick is such a help too and makes it so much easier for me.

I really love the job I have and want to keep it as long as I can so I haven't told them of my condition, and do fear the reaction when I tell them. I'm afraid they'll feel they have wasted their time on me. The work there is extremely interesting. At first I was out on plotting graphs

and plotting station locations on maps. Then for three weeks I was put on titrating the salinity of ocean water samples brought back from cruises all up and down the Calif. coast and in the Gulf of Baja Calif. I understand some cruises extend down into tropical waters too. The system of titrating was with silver nitrate which forms a precipitate with the Cl in NaCl (salt) and an indicator (Potassium Chromate) which changes color when all the Cl is used up. From the amount of chloride, the salinity amount ~~was~~ ^{is} calculated. Lots of fun! Now I am learning drafting - drawing the curves that represent the fiscal calculations of temperatures and different depths and salinities, as well as drawing the cruise routes.

And now as to the matter of furniture which composes 50% of our talk these days. It brings up the prospect of just how long we will be here. The situation is this: General Shapley expects to be leaving around August or September, though he doesn't know where he'll be transferred yet. He has told Dick that if he gets a ~~g~~ billet where he is authorized an aide, he wants Dick to go with him. If he is not authorized an aide, Dick can more or less get his choice of where he wants to go. A more senior general is slated for this post

and General Shapley expects to get Camp Lejeune ~~at~~ in North Carolina. Hoo! If he gets Wash. he could not have an aide. Dick thinks he may be due for overseas anytime now. If by any chance we do continue on at this Base, we are thinking of moving to an unfurnished apt. around Sept. if we can. So, the best thing to do about the coffee table is to wait until we find out just what is going to happen. General Shapley flies to Wash. next week and we are hoping he might learn something definite on that trip.

We are really excited about having the coffee table, and I really plan to arrange the rest of the room around it, making it the focus of attention. It's going to be such fun to have our own furnishings! We plan to do it slowly so each thing will be good and all will tie together nicely. The little chair will be wonderful to have, too, especially now with the prospect of a little one!

It's time now to head for the doctor's office, and I'll let you know the results as soon as it's verified, at the bottom of this letter.

Dick joins me in all our love to you both, Marion [Helen]
The verdict is 9 weeks pregnant! Baby is due between 4-16 Feb.!!
all progressing normally & healthy. Doctor says I'll have no trouble.

Dearest Dad,

This is just a hasty note to tell you of our plans. We have reservations on Thursday, Mar. 18th, to Guatemala on Pan-American.

I am down with the flu but expect to get back on campus tomorrow. I am still working on the paper, now 50 pages in length, and will finish up the charts and bibliographies today.

We have the house rented to a nice couple. I spend the rest of this week working on the house and packing and the final details of the paper.

It looks like I will just have to ship the excess baggage. I've got the books, we need packed, and it must be 60 or 70 lbs, I really can barely lift it. The cost of shipping books is 27¢ a pound compared to over a \$1.00 per lb. as excess. But the main thing is trying to manage that heavy thing with us. I can ship it this Friday or Monday. It should be there when we get there and we can just go over to cargo and pick it up. I know it is extra trouble, but I don't mind doing that extra bit, I think it is worth in the long run. There certainly should be no trouble at customs - all our books of our own and an old icon.

Could you tell Corcha to please tell Angelina we are coming the 18th that I'm snowed under and just don't have the time to write. Carolyn will take Spanish from her daily, and piano once or twice a week.

Yes, the cat will do just fine for us. Also, do hire Amelia; I think we will need the help.

I will bring the geraniums. I see Tell Ed I got a check from Lee Parsons, also he got extra Ford funds for us for "living expenses". Tell him I'm sorry about this delay, we just have found it impossible to get off earlier. I'm looking forward to getting down there. Dorothy is a bit upset about having to leave in the middle of school up here, but I think it will work out all right.

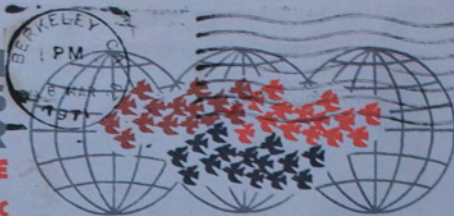
Love to Alice and yourself -

Always,

Maurice

[Hatch]

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13c



Dr. Wilson Popenoe
& Casa Popenoe
Antigua, Guatemala
Central America

VIA AIR MAIL • PAR AVION

SECOND FOLD



BERKELEY, CALIF. 947
MAR 12 1971
U.S. AIR MAIL 10c

Natalia
56 Arlington Ct.
Berkeley, Calif.
94702

[1971]

TONDUZIA

Oton Jiménez, Ph.C., Ph.D.

Adolfo Tonduria
Género de APOCINACEAS creado por Henri Pittier en honor de su compatriota y colaborador fiel "quien durante estorces años me acompañó en mis viajes, dividiendo conmigo las duras tareas y los peligros que generalmente son parte de las exploraciones, así como también las alegrías que procuran al naturalista el maravilloso espectáculo de ciertos cuadros escondidos en ignorados rincones de las vírgenes selvas o de las salveses serranías, o en el hallazgo de formas nuevas y nunca soñadas" H. Pittier, en "Las Plantas Usuales de Costa Rica"

oli olé

Continúa en la página 1

TONDUZIA , UN GÉNERO DE APOCINACEAS

Otón Jiménez, Ph.C., Ph.D.

ooooo o ooooo

(Creado por Henri Pittier en honor
del sabio botánico Adolfo Tonduz,
compatriota suyo, en Contr. U.S.Nat.
Herb. 12 ; 2 - 1908)

En el año 1902 mi padre compró al Coronel D. Sotero Rodríguez un terreno de media manzana , con una vieja casa de adobes , techo de tejas y piso de tierra , en San Francisco de Guadalupe , unos 200 metros al Oeste de la ermita . Fué menester hacerle muchos trabajos para dejarla habitable y de aspecto decente . Siete décadas despues , ya en otras manos, modernizada y embellecida, conserva todavía su estilo original.

El botánico Adolfo Tonduz alquilaba allí un pequeño cuarto, con una ventana pequeña y puerta a la calle. Estaba muy bien situado, pues Pittier con quien trabajaba, había comprado y arreglado la hermosa casa frente a la ermita, en donde vivió hasta el año 190 cuando se trasladó a Washington, D.C. Esta casa fué adquirida posteriormente por el Lic. D. Claudio Cortes Castro (G.d.a.p.)

Al adquirir mi padre la casa de D. Sotero, Tonduz se trasladó a otra casa vecina no menos humilde, perteneciente a Don David Mora, ocupando allí otro cuarto pequeño, con una claraboya y puerta interna . Su ajuar consistía en una tijereta, un taburete, un baúl y dos cajones de pino que le servían de cómoda, escritorio, biblioteca y mesa de noche . Aquí vivió, con algunas intermitencias durante 20 años, hasta 1921 , cuando el Lic. D. Luis Cruz Meza se lo llevó a Guatemala, para trabajar en una Escuela de Agricultura, en donde falleció unos pocos meses mas tarde.

Yo entré al Liceo de Costa Rica en 1909 , siendo Director el maestro insigne Doctor D. Arturo Pérez Martín . Entre los profesores de aquella época recuerdo los nombres de Francisco Montero Barrantes, Juan Dávila, Alberto Rudin, Claudio Gonzalez Rucavado, Pedro Pablo Amaya, Juan Umaña , Porfirio Góngora, Doctor Francisco Cordero , Emel Jiménez, Eduardo M. Evans, Luis Cruz Meza, Napoleon Quesada, Luis A. Silva , Julio Osma, Jose Fidel Tristán, Arturo Carrión, Richard Corfield, Jose Pablo Carnier, Niginio Cots, Tomas Potedano,

Elías Leiva, Roberto Brenes Mesen, Próspero Calderón, Enrique Jiménez Méndez, Próspero Sanabria, Salomón Castro, Emanuel J. García, Santiago Gutiérrez, Luis Charpentier, Gustavo L. Michaud y alguno otro que ahora no recuerdo. Secretario era D. Jorge Esquivel Camacho, inspectores D. Manuel Fournier Quiros, Eduardo Zamora Ulloa y Próspero Pacheco. Bibliotecario Guillermo Tristán Fernández y Porteros Porritas, Juan Mata y Jesús Arley.-

Los años de Liceo fueron para mí gloriosos, aun cuando algunas asignaturas, como Matemáticas, me resultaban duras, a pesar de que D. Nicolás Montero, amigo muy apreciado de mi familia, hizo todo lo posible por suavizarlas en lecciones privadas que recibí en su residencia. En cambio, las lecciones de Historia Natural de D. Emel, las de Física y Química de D. Alberto Rudin y D. Fidel Tristán me fueron siempre muy gratas. Aparte de la capacidad de los profesores, verdaderos catedráticos, los bien provistos y mejor atendidos laboratorios contribuyeron a aprovechar al máximo sus interesantes lecciones.

D. Emel exigía formar un Herbario con plantas de las familias que se estudiaban en cada curso. Así, desde el primer año comencé a recoger ejemplares botánicos para el mío, sin precipitaciones de última hora, lo que ocurría con frecuencia. Mi vecino Tonduz tenía entonces una modesta posición en el Museo Nacional como Conservador del Herbario. Se ayudaba, además, con algunos trabajos que le encargaba D. Julio E. Van der Laet, Jefe del Departamento de Agricultura, para publicarlos en la Revista respectiva, colaboración que también le daba el naturalista alemán D. Carlos Wercklé.-

En ese tiempo se había proyectado la formación de un herbario centroamericano y Tonduz le dedicaba su tiempo libre a la ~~misma~~ tarea de recoger plantas de los alrededores de la capital y lugares fácilmente accesibles del Valle Central con la paciencia benedictina y la técnica aprendida de sus maestros suizos. Fue una lástima que este proyecto ^{se} ~~se~~ abandonara, principalmente por la muy poca cooperación que dieron nuestras vecinas repúblicas del istmo. En aquel entonces, fuera de lo que coleccionó Tonduz por decisión propia y sin apoyo de nadie, solamente colaboró el naturalista nicaragüense D. Dioclesiano Chaves, aunque por corto tiempo. No obstante, el proyecto del Herbario Centroamericano ha sido revivido por la Escuela Agrícola Pan Americana, en Zamorano, ~~Honduras~~ ^{Honduras} y está a cargo del eminente hombre de ciencia hondureño D. Antonio Molina.-

Fui a visitar a Tonduz para preguntarle si podía acompañarlo en sus excursiones dominicales de herborización, para aprovechar su experiencia y cono-

(Tonduz)

- 4 -

de nuestra casa . Con tales antecedentes es natural que su ^{impulso} consejo y ayuda me fueron muy provechosos. Cultivé su amistad, con las inevitables interrupciones que motiva la agitación de nuestra vida contemporánea, hasta su viaje a la eternidad. Conservo gran parte de la correspondencia que nos cruzamos, con interesante información, comentarios, recomendaciones y hasta algunas regañadas paternales motivadas por torpeza e inexperiencia mías. En alguna oportunidad publicaré una selección de sus cartas.-

El trabajo de recoger plantas, secarlas, rotularlas, clasificarlas y enviarlas a los especialistas, o la identificación con los ejemplares existentes en el Herbario, atender la correspondencia, escribir artículos o consultas para el Departamento de Agricultura discurría placidamente con el Tonduz sobrio, un caballero modelo, culto, bueno, generoso, amigo de ayudar y servir a su prójimo, pulcro en el vestir, de conversación erudita y amena, a pesar de que jamás dominó nuestra lengua. Trabajaba sin descanso las horas laborables del día y en su modesto cuarto en la casa de Nor David Mora, hasta tarde de la noche alumbrado con una vela. Fumaba constantemente puros baratos, malolientes e incombustibles, que tenía que encender constantemente. Aparentemente éste era su único vicio .-

Pero un mal día se le atravesaba el demonio en el cuerpo de alguno de sus varios malos amigos que lo invitaba a tomar una cerveza en su compañía. Era encender la mecha de una explosión, que destruía su vida digna, ordenada y fecunda para convertirlo en bohemio, de naturaleza excentrica , como lo califica Standley, pero otra persona diametralmente distinta. No volvía a trabajar, desatendía el aseo de su persona y de su ropa, no comía y su ocupación era vagar por las calles, a veces solo, otras en compañía de malos amigos, visitando las cantinas, hasta que agotaba sus modestos haberes y su crédito. Nunca rió con nadie. Hablaba en su francés españolizado quejándose siempre de la cervez, único licor que tomaba. La ~~cerveza~~ que Traube fabricaba entonces se vendía a quince céntimos. Los expertos aseguraban que era intomable. Tonduz, obligado a consumirla por el precio, protestaba de su mala calidad ^{asegurando que} ~~era intomable~~ : TROB FALSIFIC LA CERVEZ (pronunciaba Traube en francés ; TROB) Y a continuación : BISMARCK TAMBIEN FALSIFIC LE TELGRAM DE EMS. Sería difícil encontrar relación entre Traube y Bismark, a menos que por ser ambos alemanes y autores de falsificaciones.-

Algunas veces los malos amigos lo llevaban al centro de la ciudad. Nunca faltan tales alimañas, para "bebérselo" y robarle cuando pudieran. Aun intoxicado, jamás rió con nadie. Se quejaba de Traube, pero tomaba su cerveza. Como esta es ^{siempre} diurética, llegaba un momento que le presionaba la vejiga y entonces, con la na-

turalidad y la inocencia de un niño se arrojaba a un poste de la luz y se ponía a orinar. Por supuesto, para el policía de la esquina aquello era una grave falta a la moral y lo llevaba a la cárcel. A veces pagaba la multa, que era de \$ 5,75 (cinco con seis, como entonces se decía) o la pagaba alguna persona que le tenía simpatía. Pero en otras ocasiones lo metían en la chirona, en compañía de rateros, "riñas" y de los elementos mas esperrnibles de la delincuencia josefina. El licenciado D. Jose Vargas Porras, de grato recuerdo, me contaba que en ese entonces era secretario de la Agencia Principal de Policía y que sentía una gran pena escribir el nombre de Tonduz, un hombre de ciencia eminente, mundialmente conocido conjuntamente con los nombres de lo peor de la granujería de aquellos días.

La temporada dipsómana duraba todo el tiempo que pudiera pagar la cerveza que tomaba él y los eventuales amigos que se le pegaban como moscas. Y así duraba dos o tres meses, pues podía sostener el vicio con su crédito. Muy liberal con él fue D. Rafael Vargas, ~~con quien vivía en la casa de Tonduz~~, quien por muchos años tuvo una cantina al pie de la cuesta de Tournon, en donde hizo buen negocio con la peonada que los sábados ~~venía~~^{la} visitaba ^{para} para satisfacer la "tripa guarera"

Pero otro buen día se bañaba, se afeitaba y mudaba, recogía los papeles de su trabajo inconcluso del cajón de pino que le servía de escritorio y se iba a trabajar. Y trabajaba, como sabía ~~hacerlo~~^{durante} dos, tres y hasta cuatro meses ~~sin~~^{de} interrupción. Volvía a ser el caballero pulcro, decente, generoso y bueno. ~~Seguía trabajando con la misma intensidad~~ Y continuaba así, mientras algun acontecimiento no previsto no viniera a ~~romper~~ el ritmo recuperado.-

A Tonduz lo trajo Pittier en el año 1889, llegando a Limón el 17 de Junio procedente del Museo Botánico de Lausanne y recomendado por el eminente Profesor Schnetzer. En el prólogo de su conocido "Ensayo sobre las Plantas Usuales de Costa Rica" manifiesta : " durante catorce años me acompañó en mis viajes, dividiendo conmigo las duras tareas y los peligros que generalmente son parte de las exploraciones, así como también las alegrías que procuran al naturalista el maravilloso espectáculo de ciertos cuadros escondidos en ignorados rincones de las vírgenes selvas o de las salvajes serranías, o en el hallazgo de formas nuevas y nunca soñadas " (x)

Con motivo de su sentida muerte en Guatemala, el 20 de Diciembre de 1921, Pittier, residente entonces en Caracas, envió la siguiente nota necro-

(x) Plantas Usuales de Costa Rica - Washington 1903

lógica que publicó La GAZETTE de LAUSANNE del 24 de Febrero del siguiente año :
" En 1877 deje Suiza para ir a la América Central con el propósito de emprender la exploración científica de Costa Rica por cuenta de este pequeño país . Tan pronto como los trabajos se organizaron fué necesario conseguir personal auxiliar y fué entonces que me dirigí a mi venerado Profesor J. B. Schnetzer pidiéndole designar un asistente para los trabajos de Botánica . El escogió a Adolfo Tonduz que llegó a San José en el curso del año 1889 . Como colector, su escogencia fué excelente . Tonduz me acompañó en casi todas las numerosas expediciones , de 1889 a 1908 y se ocupó de la investigación de los soberbios bosques vírgenes y sabanas que todavía hoy día cubren la mayor extensión de Costa Rica (1) Nuestros esfuerzos comunes, unidos a los de otro compatriota , Paul Billel de Neuchatel , arrebatado prematuramente a la Ciencia , permitieron la formación de un Herbario de cerca de veinte mil especímenes , cuyos duplicados se encuentran en el Smithsonian Institution de Washington, D.C. y ~~W~~ otras colecciones, mas o menos completas , figuran en los principales museos botánicos de Europa . Gracias a las colecciones estudiadas por los especialistas mas eminentes de ambos hemisferios , la vegetación de Costa Rica es hoy día la mejor conocida de la América Tropical y somos deudores, en gran parte , al trabajo científico de nuestro amigo Adolfo Tonduz . Despues de mi partida de Costa Rica, atendiendo un llamado del U. S. Department of Agriculture , el Instituto Físico Geográfico Costarricense , del que fui fundador y director durante quince años, se desintegró y Tonduz tuvo bruscas alternativas de prosperidad y pobreza que aceptó, no obstante, con la serenidad que fué uno de los rasgos de su caracter. Una de las ramas de la Botánica que cultivó con predilección fué la Patología Vegetal y Costa Rica le debe varios Trabajos de primer orden sobre las enfermedades del cacao , café y otras plantas cultivadas . Fué precisamente como Patólogo que fué llamado por el servicio de Agricultura de Guatemala (recomendado por el Lic. D. Luis Cruz Meza, residente allí entonces) al comienzo del año pasado . Publicó varios exitosos trabajos en su nueva carrera cuando la muerte ha venido a sorprenderle . Tonduz nació en Pully, Canton Vaud, el 18 de Septiembre de 1862 . Hizo sus estudios en las escuelas de Lausanne y los cursos de la Fa-

(1) No tanto al presente, debido a la salvaje deforestación al parecer incontrolable.

cultad de Ciencias . Tenía las características del paisano de Ginebra de Vaud : agudeza para el juicio, mucho de bonhomía y un corazón de oro , un poco agrinado en los últimos años por las vicisitudes de su vida . Ha bajado a latumba con la estima y el pesar de cuantos le conocieron . N. PITTIER" (1)

Tonduz fué, sin lugar a dudas, el "brazo derecho" de Pittier, quien no le escatimó gratitud ni elogios. Cuando Pittier estuvo al servicio de la United Fruit Company, por un corto período, en una ocasión, por sugestión de Minor C. Keith , le encargó a su viejo amigo y paisano ^{Tonduz} hacer una colección, lo mas completa posible, de las malas yerbas que crecen espontaneamente en la trocha del ferrocarril . En cierta zona, llegando a la costa atlántica, encontró numerosos plantíos de café que los coolies , importados para los trabajos rudos de la empresa , aprovechaban para fumar las sumidades florales femeninas, o sea, marihuana . Precisamente ^{se} ya habían observado en dichas zonas las frecuentes riñas y desórdenes entre estos efímeros inmigrantes, por lo que Mr. Keith por consejo de Tonduz, ordenó su total e inmediata destrucción. Ignoro si este informe fué publicado en alguna oportunidad , siendo muy importante por cuanto es testimonio de que este ^{ahora tan común} alucinógeno era conocido y usado, aunque en un círculo muy reducido, en las postrimerías del siglo pasado. ^{el hecho} No conozco ^{la} relación verbal del propio Sr. Tonduz.-

Tonduz trabajó tambien en las fincas de la empresa Lindo, llamado por su compatriota Sr. Emmanuel Nicod, principalmente en la Hacienda La Gloria, cerca de Juan Viñas, en donde hizo importantes herborizaciones . Tambien se acogió al alero fraternal del naturalista Lankester, mas tico que inglés , en la Hacienda Las Cóncavas, verdadero pedacito del Paraíso Terrenal, que he referido en otra ocasión, y allí vivió ^{en} tiempos felices en labores de jardinería y horticultura y caficultura. Las hijitas de Lankester lo adoraban, pues les daba encantadoras lecciones de Historia Natural . En otras ocasiones cuidaba, con el ^{paciencia} esmero y capacidad que fueron sus características, el jardín de Do. Amparo de Zeledón, en su maravillosa quinta de La Sabana ^{Pero} Su verdadero hogar fué siempre, en tiempos prósperos o desgraciados, la casa de Don David Mora, en San Francisco de Guadalupe, en donde era un miembro de la familia.- ^{considerado como}

(1) Nota de La Gazette de Lusanne : " Adolfo Tonduz nunca olvidó su Canton de origen : hizo numerosas donaciones a los museos agrícolas y botánicos. Participó en la Exposicion Nacional de Agricultura de Lausanne, en 1910, enviando varios trabajos"

El autor de estas líneas agradece ^{sinceramente} al Sr. Vice-Consul de Suiza en San Jose, Hon. Jean Holzer, ^{sus gestiones ante el} ~~Departament Politique~~ ^{Departament Politique} Federal -Organisations Internationales, Berne (Suisse), ^{cuya respuesta} con fecha febrero 11, 1964, ^{entregada} fotocopias de la publicación citada, ^y ~~la excelente~~ ^{la excelente} fotografia de pasaporte que figura en estas notas, ~~que oportunamente~~ ^{que oportunamente}

~~manejaron~~ le fueron entregadas

A pesar de su vida calificada como "excentrica", Tonduz ocupó posiciones aceptables en la Sociedad Nacional de Agricultura, en el Museo Nacional y en el Servicio de Patología Vegetal, del Ministerio de Fomento y Agricultura, llevado por el Ingo. D. Enrique Jiménez Núñez, quien, al igual que a Wercklé, les tuvo buena voluntad y singular aprecio, tratando de que el país aprovechara lo mucho que valían, no siempre con éxito. El Conde de Perigny, en ~~1913~~ ¹⁹¹⁴, lo incorporó a la desafortunada expedición por el Río San Juan, teniendo que regresar por el Río San Carlos, sin lograr hacer colecciones en todo ese trayecto. Radicó un tiempo en San Ramón antes de regresar a la capital y aunque herborizó algo en esa zona, el material colectado se perdió en casi su totalidad por cuanto le tocó el turno a una tanda cervecera. Por entonces yo pasaba mis vacaciones de medio año como huésped de la familia Hopkins-Gambos, invitado por mi condiscípulo Gonzalo Moncada, ~~1914~~ ¹⁹¹⁵ que recién emprendió viaje a lo ignoto. Do Anastasio Alfaro, Director del Museo Nacional, me recomendó traer a Tonduz para evitar sanccionarlo por abandono a su trabajo. Empresa romana! Tuve que pedirle auxilio al Sr. Jefe Político de San Ramón, Sr. Acosta Piepper, con cuya paternal intervención logré montarlo a caballo y en una jornada de casi diez horas, paso a paso, llegamos a Grecia y de aquí, en otra jornada igual, a Alajuela, siéndome fácil después llevarlo a la casa de mi vecino For David Mora.

Tonduz había conocido a dos ^{distinguidos} costarricenses cuando estudiaban en Ginebra, el Doctor D. Carlos Fupo y el Ingo. D. Luis Matamoros. Con ambos cultivó muy sincera amistad hasta el fin de sus días, principalmente con el médico, que siempre acudió solícito para atenderlo en las dolencias motivadas por su vida desordenada, que en ocasiones eran serias. Por eso fué que Pittier, conociéndolo ^{tan} bien, nunca quiso llevarlo a Venezuela, aunque se lo pidió en mas de una ocasión. Allí no encontraría otro For David Mora que lo cuidara y atendiera en tiempos de crisis. Y precisamente eso le ocurrió a poco de llegar a Guatemala (1)

Wilson Popeno cuenta que cuando visitó Costa Rica en 1920 conoció a los botánicos Tonduz y Wercklé en casa de D. José C. Zeledón. Su gentil compañera, Da. Amparo, los tenía ocupados atendiendo su magnífico jardín y huerta y al lle-

(1) Cuando asistí al I Congreso Centro-americano de Farmacia celebrado en Guatemala en 1936, como delegado de nuestro Colegio de Farmacéuticos, propuse visitar su tumba para llevarle flores, como homenaje y recuerdo a uno de los naturalistas de mayor mérito que haya explorado la América Central. Fué muy grande mi pena cuando se me dijo que no había posibilidad, ni remota, de localizar el sitio donde descansan sus restos, por cuanto había sido enterrado en el osario comun. Sólo pudimos guardar en su memoria un minuto de silencio y devoción. En este particular fué mas acortunado Wercklé, pues sus restos acompañan los de Da. Amparo y Don Jose Zeledón, en su mausoleo en el Cementerio General de San Jose.-

varlo al jardín para presentárselos, discutían acaloradamente sobre cual era la causa del daño encontrado en un cuadro de papas que experimentaban. Wercklé sostenía que era un gusano el causante del destrozo, mientras que Tonduz lo rebatía acaloradamente, en su francés españolizado: "No señor! No es le gusan, es la rat que com la pap de noch (No es el gusano, es la rata quien se come la papa de noche) ~~Voy a ir a ver si encuentro a la rata~~
~~que me la comen.~~

Ni a Tonduz ni a Wercklé se le conocieron amores ni amorfos y fuera de su pasión por las plantas su flaqueza humana se concentró exclusivamente en la "última consolatio" de Lulio. No obstante, allá por el 1912 Tonduz recibió una pequeña herencia familiar, algo así como de mil dolares^{amo}. Trabajaba entonces en la Hacienda la Gloria, en Juan Viñas. Como jamás soñó poseer tal fortuna, la inesperada prosperidad le trastornó el seso. Convirtió a colones el giro de francos suizos, pagó sus deudas y se fué a la sastrería de mayor posición de San José y se vistió de gala, desde zapatos de charol a sombrero "de alta forma". En el Museo Nacional trabajaba una apreciable señorita atendiendo la biblioteca, a quien Tonduz no le había dirigido otras palabras que el saludo de buenos días. Con su buen lastre de cerveza, de legítima Leona y no la falsificada por TROB y blandiendo un valioso bastón de ébano con puño de plata, se dirigió a D. Anastasio, el Director, para pedirle en matrimonio. Trabajo le costó a D. Anastasio convencerlo de que sólo era ^{SV} jefe, sin ningún parentesco con su eficiente empleada, quien, por otra parte, asustada del disparatado proyecto de su antes indiferente compañero de trabajo, huyó a su casa mientras al bueno Tonduz ^{abandonaba} ~~wwwwww~~ tan absurdos proyectos. Sus amigos, malos amigos, lo volvieron a lo de siempre, a los mostradores de las cantinas para "bebérselo" hasta agotar el último franco suizo, su crédito y lo que le dieron por su traje de "alta forma" y hasta su bastón de ébano con puño de plata, iniciando un nuevo viacrucis del maldito alcohol, causa única de su penosa y desgraciada vida, tan digna de mejor fortuna.-

Ademas de su inmensa ^{labor} ~~labor~~ como botánico herborizador, de la cual da una modesta idea la lista de algunas especies vegetales bautizadas con su nombre, Tonduz publicó en varias revistas, ~~en las revistas de la época~~

européas muy valiosos estudios sobre "Exploraciones botánicas en Talamanca" "Exploraciones en la parte meridional de Costa Rica", "Herborizaciones en Costa Rica", "La Fumagina del Cafeto", "La enfermedad del Cacaotero", reproducidos y traducidos a varios idiomas en revistas científicas. Fué asiduo colaborador del Boletín de la Sociedad Nacional de Agricultura, mereciendo citarse estudios valiosos sobre el Baisamo de El Salvador, Enfermedades de las Papas, plantas forrajeras, etc. etc. Mantuvo muy activa correspondencia con los mas destacados naturalistas del mundo entero.-

Ademas de las numerosas especies de plantas que llevan su nombre, Pittier creo un género de Apocináceas para honrar a su compatriota y compañero y amigo, el género TONDUZIA, publicado en las Contributions of the United States National Herbarium, 12 - 2 - 1908, que ~~he~~ describe así :

"Arbustos o arboles con hojas agrupadas alrededor del tallo, de 4 hojas rara vez opuestas por el vértice, eglanduladas; inflorescencias laterales o subterminales, tirsiformes, con numerosas flores pequeñas blancas o de color crema: caliz dividido en cinco partes, dejando la división casi hasta el receptáculo; los lóbulos poco menos que iguales, ligeramente imbricados sin escúmulas; corola saliforme, sin apéndices interiores; el peciolo dividido en cinco partes iguales, convolutado hacia la izquierda; anteras no conniventes, completamente involucradas, el conectivo no ensanchado; ovario de dos carpelos separados que contienen varios óvulos biseriados, rodeados en la base por un nectario anular, bajo, que puede estar ausente; fruto de dos folículos dehiscentes, teretes; numerosas semillas achatadas, secas, densamente ciliadas en los márgenes"

El género Tonduzia es ~~de~~ afin con el muy conocido Rauwolfia, algunas de cuyas especies tienen gran importancia en la terapéutica contemporánea y hasta se le ha confundido. En Costa Rica solamente existe la especie tipo, que le sirvió a Pittier para su creación, con ejemplares colectados por Tonduz en Santa Maria de Dota. Posteriormente ^{Robert E. Woodson,} ~~del~~ ^{la especie} Missouri Botanical Garden, encontró que ~~había~~ ^{había} sido descrita y publicada por el ~~SEÑOR DON BENITO WOODSON~~ ^{Alfonso De Candolle} como Rauwolfia longifolia A.DC. ^{pero} por lo que, de acuerdo con las reglas de la Taxonomía Botánica, su nombre correcto queda definitivamente Tonduzia longifolia (A.DC.) Woodson

y corresponde a un árbol que alcanza hasta 6 metros, encontrándose en toda la América Central y parte de México. En Guatemala, Standley y Williams (Flora of Guatemala 24-VIII-4 p. 402 - 1969) señalan las especies Tondusia macranthe, Woodson y Tondusia Pittieri, Donnell-Smith, pero ninguna de las dos se encuentra enningun otro lugar. Standley, en Flora of Costa Rica (p. 948) asegura que existe una especie de Tondusia en Brasil, pero sin indicar ^{cuál} ~~cuál~~. En Costa Rica no tiene nombre vulgar. En El Salvador se le llama "ametillo" y "chilindron de montaña" y en México "chamicillo"

Entre las plantas ornamentales que llevan el nombre de Tonduz merecen citarse la cactácea, cultivada ahora en la zona tropical y subtropical de todo el mundo Werckleocereus Tonduzii, Br. & Rose, la bellísima Salvia Tonduzii, Briq. ~~mucho~~ ^{apreciada} muy ~~mucho~~ en jardines de la tierra fría por sus vistosas flores rojas, Quercus Tonduzii, Seeman ^{un} roble de los bosques del Posa, Ficus Tonduzii, Standley ~~un~~ ^{un} magestuoso higuero o chilamate, muy extendido por todo el país, Ocotea Tonduzii Stand. árbol maderable, conocido como Ira amarillo o Ira mangle, Phoebe Tonduzii, Mez, uno de los varios "aguacastillos" del país, Calliandra Tonduzii (Brit. & Rose) Standl. arbusto muy ornamental, de flores rojas, conocido aquí como "carbancillo" y en Panamá como "aromo", Inga Tonduzii Dn. Smith, uno de los "guavos peludos" cultivados como sombra en los cafetales ^{de frutos comestibles,} Croton Tonduzii, Pax, conocido como "copalchi" cuya corteza se usa como la del verdadero, Calyptranthes Tonduzii, Donn. Sm. la "marta amarga" o "corveza" ^{un} arbolito antaño muy abundante en los alrededores de la capital, cuyo cultivo en parques y jardines debe merecer atención, etc. etc.

La nómina de algunas especies de plantas, de las familias mas diversas, incluyendo numerosas criptógamas que aquí no se citan, da una idea de ^{su} ~~su~~ labor benedictina y fecunda, que perdurará indefinidamente en los numerosos representantes de la Flora de ^{Centro América} ~~Costa Rica~~, honrados con su nombre.-

Fungicides for Sigatoka Control

New York Laboratory Tests

March 1939 to February 1940

Sprays

<u>Name</u>	<u>Manufacturer</u>	<u>Composition</u>	<u>Copper Per Cent</u>	<u>Lbs. Used Per 100 gal.</u>	<u>Cost per 100 gals.</u>	<u>Spreaders and Stickers</u>	<u>Qualities Spreading</u>	<u>Sticking</u>	<u>Recommended for Field Test</u>	<u>Remarks</u>
Microgel	Tennessee Corp.	Tri-basic copper sulfate + sticker- spreader	50	4.0	\$0.40	Yes	Fair	Good	Yes	Per Jamaica field tests 4 lbs/100 gals. gave about same control as 5:5:50 Bordeaux
OB 21	Winthrop Chem- ical Company	Copper oxy- chloride $\text{CuCl}_2 \cdot 3\text{Cu}(\text{OH})_2 \cdot 1\text{H}_2\text{O}$	57	1.66	-	No	Poor	Poor	No	Comparable to Nichols Copper Co. Z-0
Cuprocide 54-Y	Rohm & Haas	76% yellow cuprous oxide 24% china clay	67.2	3.0	0.80	Yes	Poor	Poor	No	Poor spreading Poor adherence now under field test
KB 9010 Spray	E. Merck Darmstadt Germany	20% basic cop- per sulfate, 20% benzoic acid, 30% organic sticker- spreader, 20% inert silicious material	5.33	2.0-4.0	-	Yes	Poor	Poor	No	Only traces of residue were dep- osited after 2 sprayings-aqueous solutions are acidic
Cu B1 Dust	"	10% copper oxy- chloride, 80% clay or bentonite + 10% organic sticker	6.27	-	-	Yes	Good	Poor	No	Initial coverage good-not very resistant to re- moval by water

Spreaders and Stickers for Sigatoka Control

New York Laboratory Tests

March 1939 to February 1940

<u>Name</u>	<u>Manufacturer</u>	<u>Composition</u>	<u>Type</u>	<u>Amount used per 100 gallons</u>	<u>Cost per 100 gals.</u>	<u>Remarks</u>
Vatsol OS (also sold as Aerosol OS)	American Cyanamid and Chemical Company	Alkyl aryl sulphonate	Wetting agent (for use in farm washing)	3 lbs. per 100 gallons of HCl wash solution	90 cents per 100 gallons wash sol- ution	Did not increase the efficiency of spray removal
Agricultural Moytol	Standard Chemical Products Company	Water soluble oil sticker	Sticker	One-half pound	\$0.08	Equally effective as Grasselli's sticker-spreader or Monsanto's Santomerse. Field test under-way.

Caracas

Sept 28 57

Dear Pop: I'm reduced to penmanship by Cupid's arrow. The USDA following the practice of State sends us romantic young girls (pretty too) just out of high school and these Italian terrorists who stop off in Venezuela enroute the US as immigrants pick them up lead them to the altar and to the McCusker gates swing open. This is all very fine biologically but it constantly depletes the secretarial staff. Replacements are by that well oiled system of sending a girl from the office in Sweden who first has to await her replacement from Burma who in turn has two months home leave coming before she goes to Sweden. We are in the middle of the first discarding. You know going through the accumulation of fifteen years hoarding and agreeing to throw away what should have been given to the poor fifteen years ago. This leaves a mountain of stuff that has to be gone over again and again until only essentials are left and 90% of those will never be used again.

Our present plan is to start in housekeeping in San Francisco (the cheap price) as long as my 92 year old mother lives. Before disappearing into the fog and if you are still in Guatemala Dec 1 we will fly in there and from there to Mexico City. I'm afraid my description of local color on the RR from San Jose to MC via Tapachula discouraged Dimp. From Mexico City we will put in a month getting to places such as Coscomatepec, Puerto Angel, Purificacion, Tuxtla etc. By that time

we will have accumulated enough fleas to improve
the Calif breed. From Mex City we go to Washington where I
take 4 wks to sign out why it takes 4 wks I wouldnt know but
Im sure there will be several conferences, committee meetings
and staff gatherings before I become an honest man.
Maye + Joe + 2 children are threatening to be in the US in
Jan. and that is one or rather 4 reasons for me being
there too. Too bad Helen is stringing all those electric
bulbs around, suppose they are colored too. Most of our
troubles began when man learned how to prolong
the 12 hr day. Here we are an animal designed for
12 hrs of darkness and find ourselves having to devise
a lot of do it yourself jobs to justify the extension of
Mr Edison's device. The electric light ranks just
below the telephone as a disturber of life. The Spornoids
never would have conquered this continent if Edison had
come first. They would have been sitting around reaching
Tome and Seleccion instead of killing Indian bucks and
pollinating the agaves. We have among us at
the moment Lowell Thomas who is about to startle
the movie world by penetrating the jungle wilds of
Venezuela. With the high rate of exchange its going to
cost something to round up anacondas and tigers to
spring from the empty bush lands of Angel Falls
but it can be done. Two years ago Cecil Pitt paid
\$30000 to have a professional animal photog + sound
man record jungle life and although I set through
2 days of God knows how many miles of film the finished
product hasnt been exhibited yet. As of this writing we
will be seeing you early in Dec if you stay put. Will
keep you informed meanwhile hold everything
Love to you both
J [Jim Kempton]

Canacas
Oct 28 57
Houston Fat Stock Show people
due this week.

Dear the Pops

Pleased to see the Guatemalan stamps.
There is nothing like the shade of an oil rig to
make contented fat cattle and the wells are good for
general agriculture too. If the oil rolls out of the
country as pictured those pottery carrying Indians
will soon be moving their wares via Cachalacs.
When that happens births and deaths will about balance.
This oil business is fantastic. They have even found
the stuff out in the Hopi country and those Lunis, Navajos
and Hopis are getting \$3000 per acre for oil leases.
I was shocked to learn of Penick's death. Last I heard
of him he had returned to the far South to hunt up poorer
and poorer tropical soils in more and more remote places.
They go one by one. I hadn't heard of Shamel for years.
Actually a very gifted fellow besides being a charming
personality.

We are in the throes of discarding the strong savings of
a decade. Tons of stuff to throw away and that still
means tons of useless things to be sent to the US to throw
away up there.

Now that the die is cast we are anxious to be up and
off. Perhaps we have postponed this move too long. My
best friends (most observant too) say we had our
retirement and its time I got busy and did
something.

Not surprisingly I discover my plans for a tranquil
life shooting rats with my blow gun from the back

Alley kitchen window in San Francisco does not square
with Dims's idea of the ideal life. If I can't shoot rats
what am I taking this 14 ft blow gun and poisoned darts
all the way to Calif for? My scouts in the U.S report
nothing but Sputnik jitter with the Army heavy Air Force
all in the act. From all I gather there soon will be
nothing left of the taxpayers money except Sputniks and
great piles of PL 480 surplus foods in out of the way
places.

We will cable you a week before we leave here
and despite your little election problems (we have one
coming up Dec 15) we still plan to fly direct Pan Am
to Guatemala City Dec 1. In the meantime hold
everything save the volcanic eruptions to cover the
noise we will make when finally we get together.

Affectionately
J.

2110 Jackson Street
San Francisco, California

94115

February 16, 1965

Dear Pop; You are getting worse and worse as a correspondent or else the mails of Guatemala have gone to pot. Had a letter from Marge in Spain who reported you couldn't come to Spain without Hugh who natch had things to do other than European travel. So I'm telling you now that Dimp, one of our Maryland granddaughters and I plan to be in Spain during August and Sept. The grand daughter who is gainfully employed teaching school can only be away in August so we plan to take her over send her back in time for school opening then stay on another month ourselves. I realize Spain, or Madrid, is more than likely to be hot during those months but heat is no great deterrent. If you can make the break you had better join us there. Getting back to those midnight dinners should make a change in your perspective. Maybe you can even find a market for those "Antigua" cigars.

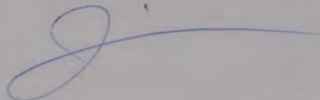
I believe I wrote you we spent New Years in Death Valley but even if I didn't I can tell you that there isn't much horticultural future for that valley. We haven't been far from Sf since then but hope to go to Vancouver in the Rhododendron season.

These days we hear a lot about Viet Nam, civil rights and the distress of Appalachia. None of these subjects is very interesting but some times stories grow out of them.

Seems there was this unemployed coal miner from Eastern Kentucky who was sent to Italy by one of our Foreign Aid funds probably to improve his morale. They do things just about that sensible. Anyway he sight saw Rome and the Vatican. Once home his brood of ten hungry brats gathered around his knee to hear all about the trip. I can't tell you whether he recited in ballad form with guitar accompaniment but I suspect he did. Anyway he got his tale to the Vatican and told what a luxurious place it is. "Why. He said "They told me they even have holy water in the toilet bowls" At which one of the avid listeners spoke up "What's a toilet bowl?" "Now son don't ask me. You know I aint no Catholic." As I type this the thought crosses my mind this story has been told many times before under different settings but its too late now. Its not too late though for you to start planning to join us in Spain.

Keep away from salt. I don't believe I have to caution you to go lightly on the Jim Beam as its not readily come by in Guatemala.

Affectionately



2110 Jackson Street
San Francisco, California

94115

April 18, 1965

Easter Sunday and raining.

Dear Pop: You must be back in Guatemala by now as otherwise you would miss the procession of the Virgin. I can see you now, the sun shining, birds singing, choirboys chanting, all the youth and beauty in its best clothes and Don Wilson sitting on the park bench watching the gente stroll past while smoking, I trust, a home-rolled puro. You do get around. Here in the way of processions instead of the Virgin and her azucenas we have the beatniks and their protest placards.

You wrote that Paul's wife thought you have been neglecting your offspring which is a charge that cannot be sustained. When children reach a certain age their lives are their own and its a wise parent who recognizes that fact. Although you may not rightly be charged with neglect I do think it is a wonderful idea to fill your house with the grandchildren. The thought of wild young things popping in and out of the doors and making the welkin (whatever that is) ring is a pleasant one to contemplate. There is nothing like youth to stir up the dust and put new life in the old stones. Bring back the marimbas I say for by doing so you are not only enjoying yourself but you are ensuring that some members of your family will continue what you have established. Some of those grandchildren are old enough now so you can put them in the saddles with a blanket a few tortillas, an onion or two and a little queso and tell them to be off into the mountains and not return for at least a week. They will have the time of their lives and never forget it. As a by product, of course, you will have a few days of tranquility.

Speaking of Hugh's money he has it made and I can add deserves it. It is hard for me to adjust to all the money being turned loose these days. Just last Sunday Deral Langham phoned me from Fallbrook, where he is living these days, and said he was being considered to head a project to develop dryland agriculture in the American Tropics! Seems one of the Foundations has given the University of Calif. Riverside campus \$500,000 as a starter on this venture and Langham is being considered for the Latin American end. I judge there ~~are~~ to be Asian and African developments and the slight sum mentioned above is the ante. The real figure being bandied about is up in the millions.

A day or so after Langham's phone call I received a letter from a Nathaniel Coleman who signs himself as acting Director of the Dry-Lands Research Institute, UC, Riverside who intends to establish close relationships with Latin American Universities and research institutes to provide for exchange of staff and students and to develop UC staffed operations in a few key localities abroad. He wanted my assessment of Langham which I gave him but as usual it seems to me there is too

to spend it all at once and thus prove to the donor justified. I always like to see these things start if accomplishment justifies expand slowly. I think that was the key to the success of the Rockefeller Foundation's efforts in Mexico.

Perhaps you know Nathaniel Coleman but from his letter I would conclude his knowledge of Latin America is not extensive. I get glassy eyed when a chap writes of selecting a few Latin American Agricultural Research Institutes with which to cooperate just as though there were hundreds from which to make a selection. It gives me the impression that the fellow has not spent much time south of the border. Oh well this is another generation. Why just this morning I read an editorial chastizing Sukarno for heaving out our Peace Corps. The editorial pointed out that of the 30 peace corpsmen in Indonesia 29 were devoting their time to instructing the Indonesians in calisthenics! The editor thought this was a thoroughly worthwhile endeavor and that Sukarno was losing an opportunity of a lifetime. My own feeling was that for once at least Sukarno was showing good common sense. If all the Peace Corps can do for the Javanese is show them new ways to exercise they had best come home. I meant to save and send you a newspaper story written by an ex peace corpsman from Colombia but somehow it got away from me. This fellow was not writing to be critical but merely to tell what he had done. It was amusing involving such things as his boss in Bogota sending him out to show the Colombians in some back water town how to treat cattle for various diseases. As he reported, he didn't know anything about treating cattle but he was certain he knew more than the natives. So off he went picking up a local to act as interpreter. These two lads worked their way toward the appointed village and our hero would sit through long sessions of his interpreter with roadside acquaintances thinking they were discussing fine agricultural points only to discover after it was all over that they were talking of bull fights. The interpreter finally gave up, he was a Colombian, and our hero had to latch on to a peon who said he knew where the village was. After a week of wandering the peon finally confessed he had never heard of such a place and as it turned out eventually there was no such village. All this effort took just about a month so when our man got back to a real town and reported to Bogota he was told to stay where he was and make himself useful until Bogota could locate another remote village that needed his services. I judge his two years in Colombia were spent very pleasantly and very much in the above fashion. He now feels that his Colombian experience has fitted him for some gainful occupation in the USA and is a little surprised that heads of big corporations are not seeking him out.

We still plan to go to Spain for August and September and wish you could find the time to be there too. Hope this finds you in good health and not too harassed with projects.

Frederick B. J.

2110 Jackson Street
San Francisco, California

94115 November 6, 1965

Dear Pop; Enclsed is a copy of the letter I sent Singleton. As you will see it does not contain an offer to finance casting more medals. The reason for this omission is that on second, third and more thoughts I was afraid that if the AGA had an immediate though temporary "out" with such an offer it would be relieved of having to reach any decision as to the ultimate home of the medal. Soon all of us who know anything about the medal will be gone and unless something positive is done now the medal might as well be gone too.

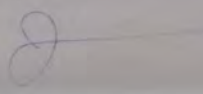
We can always come forward with the offer to pay the cost of a medal for a worthy candidate but unless we get this custodial matter settled now it won't be settled in our day. At least the AGA will know there is a living interest in the bestowal of the Meyer Medal.

What the US really needs at this moment is someone with vision to select for the Peacecorps, the Fullbrighters and the Foreign Aiders at least a few young college grads who are interested in plants. Think of the thousands of young Americans who are scattered at random in the brush of out of the way places, and who according to my observation are wandering more or less aimlessly about, who had they been properly chosen, could be collecting seeds and plant propagating material. It is all the more unfortunate that this has not been done as I read that the Deputy Director of the Peace Corps Warren W. Wiggins has become dissatisfied with current aims of his army of 13,000 and is planning to recruit the next batch from what he calls the activist students who organize sit downs and street riots. In fact he is coming to Berkeley to get the riot leaders. His idea, as he states it baldly, is to have the field peace corps spark revolutions in those countries where they feel things are not conducted according to their young ideals. Just how this squares with the name Peace Corps Wiggins does not say. What I see is that each of the three independent groups who put Americans abroad and who depend on the Congress for increasing appropriations is striving to get established as the agency that is doing most to create Democracies abroad. Where this will all lead I'm not too certain but hope it will result in getting all of them kicked back home.

We had a wonderful time with you and enjoyed every minute of our brief stay in the land of perpetual spring. Whenever you can get to San Francisco there will always be a bed waiting you, a shot or two of the old red eye but not I fear any Corona Coronas.

We both send our love

Affectionately



11

P. O. Box 458
Goulds, Florida 33170
August 13, 1971

Dr. Wilson Popenoe
Antigua
Guatemala, C. A.

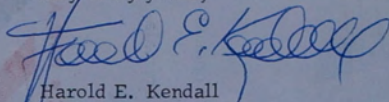
Dear Doctor Popenoe:

Thanks very much for your two letters of August 6th which arrived just as I am leaving for a trip to Maine for ten days.

After I get back I will dig into some maps also and try to be a little bit oriented.

I am hoping that we will be able to cover a good deal of the ground suggested.

Very truly yours,


Harold E. Kendall

HEK/b

Harold E. Kendall

P. O. Box 458

Goulds, Fla. 33170 USA



13¢ AIR MAIL



Dr. Wilson Popenoe
Antigua
Guatemala, C. A.

AÉROGRAMME • PAR AVION



AMERICAN POMOLOGICAL SOCIETY
G. M. Kessler, Secretary-Treasurer
Dept. Hort., Michigan State University
East Lansing, Michigan

July 8, 1960

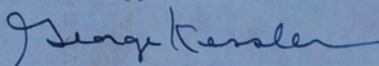
Dr. Wilson Popenoe
Antigua
Guatemala

Dear Dr. Popenoe:

Thank you for your June 27 letter. Thank you for your suggestions for chairman of the A. P. S. committee on tropical and sub-tropical fruits, should such a committee once again be revived. I'm pleased that you are willing to serve as a member of such a committee, and I will pass this information on to our president, Paul Shepard.

Thank you for your interest.

Cordially,



George M. Kessler
Secretary-Treasurer

GMK:bm

G. M. Kessler
Dept. of Horticulture
Mich. State University
East Lansing, Mich., U.S.A.



Dr. Wilson Popenoe
Antigua
Guatemala

AIR LETTER • AÉROGRAMME • PAR AVION



PAIS DE ETERNA PRIMAVERA
COUNTRY OF ETERNAL SPRING
LE PAYS DE L'ÉTERNEL PRINTEMPS
GUATEMALA
DAS LAND DES EWIGEN FRÜHLINGS



March 7, 1961

Dr. Wilson Popenoe
Escuela Agricola Panamericana
Apartado 93
Antigua, Guatemala

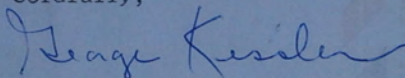
Dear Dr. Popenoe:

Thank you for your letter and check for membership in A. P. S. for Mr. Benitez. I hope he benefits from his association with us.

I hope to hear from your nephew, John Popenoe, in the very near future concerning his plans for the Tropical Fruits Committee. I am sure that when you see him during your stay in Florida during the coming weeks that you will have some pretty good ideas for him.

Thanks again for your interest and help.

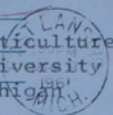
Cordially,



George M. Kessler, Sec.-Treas.
American Pomological Society

GMK:bm

G. M. Kessler
Department of Horticulture
Michigan State University
East Lansing, Michigan



Dr. Wilson Popenoe
Escuela Agricola Panamericana
Apartado 93
Antigua, GUATEMALA

AIR LETTER • AÉROGRAMME • PAR AVION

FIRST FOLD

SECOND FOLD

