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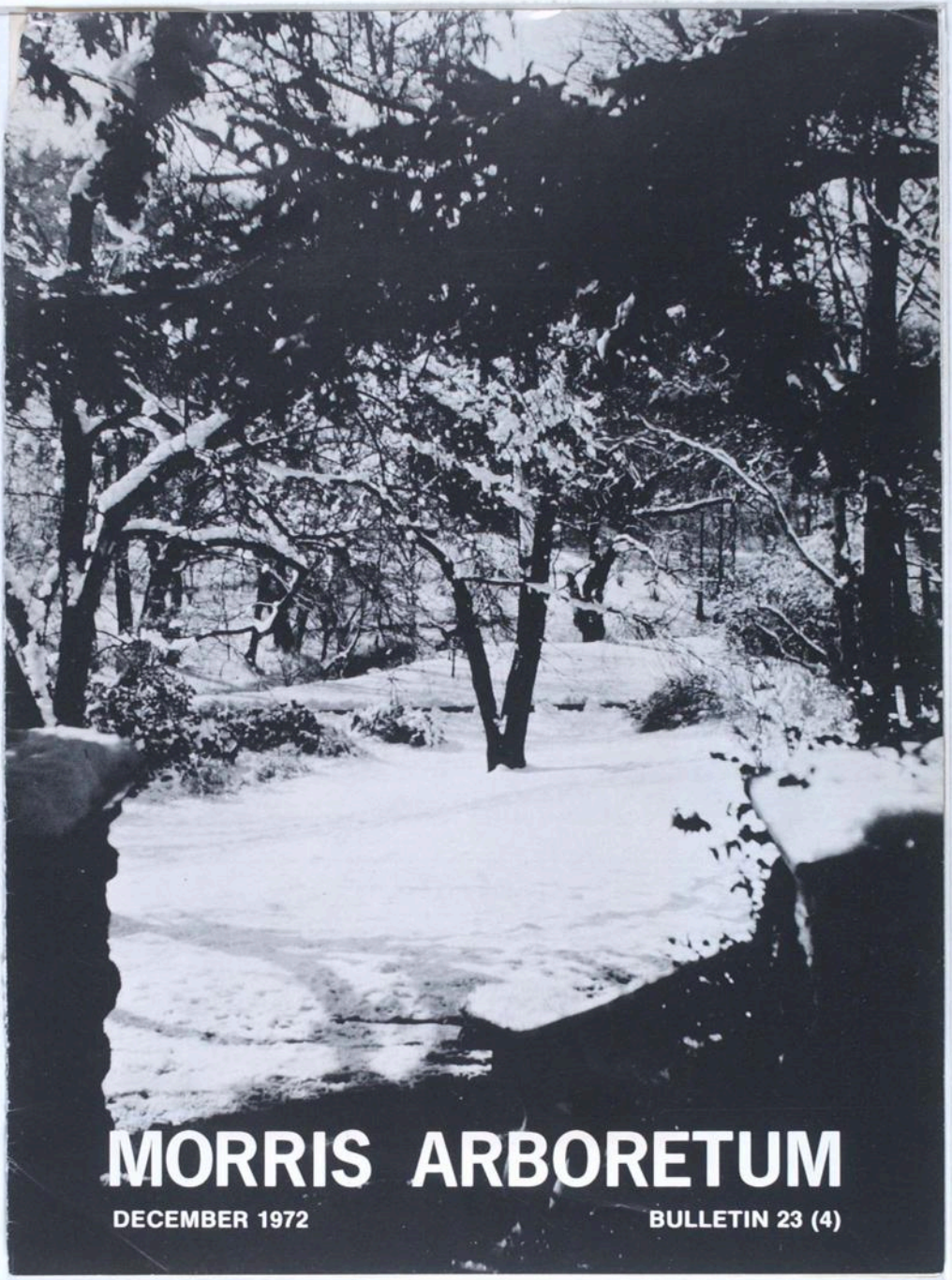
A Selected Guide to the Literature on the Flowering Plants of Mexico

By IDA KAPLAN LANGMAN

BULLETIN OF THE TORREY BOTANICAL CLUB
VOL. 92, NO. 6, PP. 494–500 NOVEMBER–DECEMBER 1965



MORRIS ARBORETUM

DECEMBER 1972 BULLETIN 23 (4)

INDEX NOMINUM GENERICORUM

The Eighth International Botanical Congress, held at Paris in August 1954, instructed the International Association for Plant Taxonomy to prepare an Index Nominum Genericorum. This card index will ultimately be a complete record of all validly published generic names. It is based on original bibliographic and nomenclatural research of the printed publications of the names and of other primary sources. Each card of the ING provides the full bibliographic reference to the original publication as well as an indication of the type-species and, if necessary, of the nomenclatural status of the name. The family and main higher taxon to which the respective genus is usually assigned are cited for easy reference.

The twenty-third set of a thousand texts was published on 15 December 1965. So far seventy-three specialists have taken part in the preparation of the texts. These specialists are indicated by numbers on each card; a full list of them will be published in one of the coming numbers of Taxon. A major part of the preparation of the texts, and all editorial work, has so far been carried out by the staff of the International Bureau for Plant Taxonomy in Utrecht. During almost the entire period, most of this work was done by Dr. J. J. Swart, who held a half-time appointment by the University of Utrecht with the exclusive task to work on ING. Dr. Swart will reach the age of retirement in June 1966 but hopes to be able to finish his share of the work in the coming three years.

Taxon - Jan. 1966

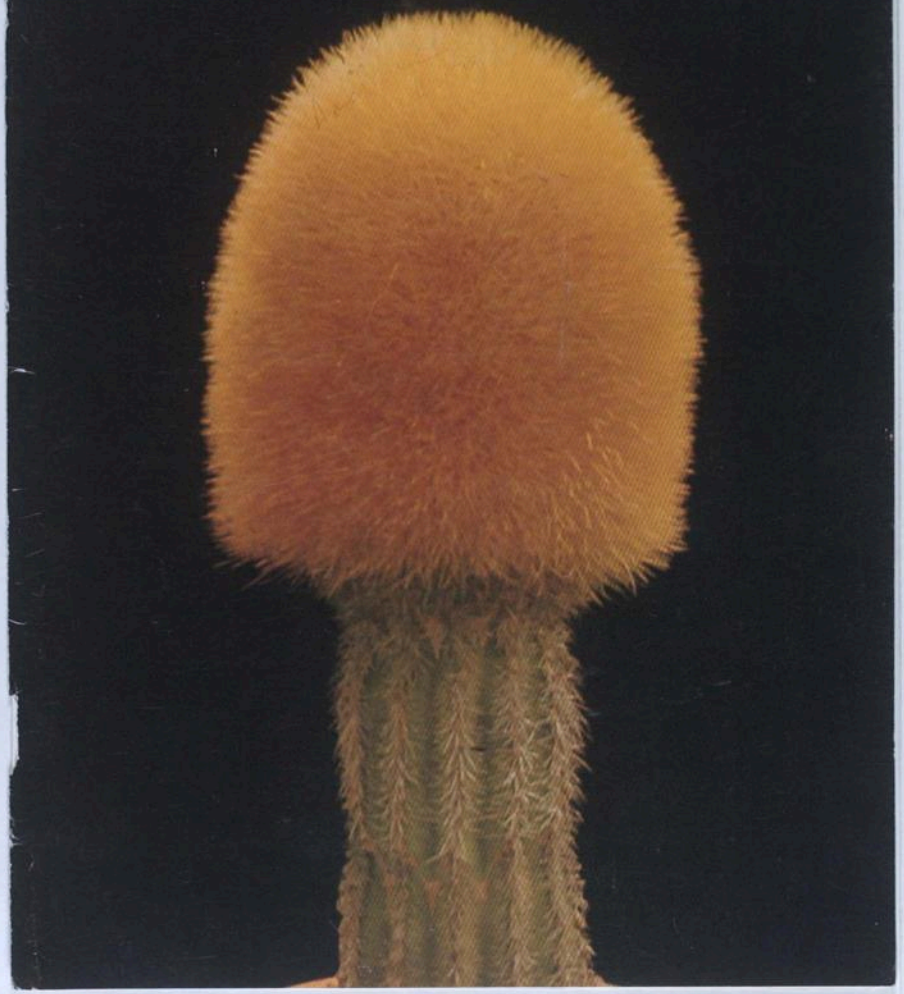
In view of the pressing need to finish the work on the index in the course of the next four years, the IAPT requested the National Science Foundation of the U.S.A. in the beginning of 1965 to provide additional support. In November 1965 a substantial grant was awarded to the Association through its regional-treasurer in the U.S.A., Dr. R. S. Cowan, to support activities leading to the completion of the project. The Department of Botany of the Smithsonian Institution has offered to house the staff of botanical bibliographers which will be employed under the grant. IAPT has gratefully accepted this important support from both NSF and the Smithsonian Institution and has now set up a second ING office at Washington. The bibliographic work is directed by Mrs. Ida K. Langman, who will work in close cooperation with the Utrecht office. The technical part of the editing and publication of the cards will still be done at Utrecht, but the preparation of the text as well as the scientific editing will from now on take place both at Washington and Utrecht. The National Science Foundation has set aside part of the grant to enable Dr. Swart to continue his work at Utrecht for three years.

Mrs. Ida K. Langman, who heads the Washington team of workers on ING is the author of "A selected guide to the literature on the flowering plants of Mexico", published by the University of Pennsylvania Press in December 1964 (see Taxon 14: 201-202. 1965). In August 1965 this work received the Oberly Memorial Award, granted by the References Services Division of the American Library Association for the best bibliography submitted in the field of agriculture and related sciences in 1963-1964.

F. A. S.

CACTUS AND SUCCULENT JOURNAL

VOL. XLV JANUARY-FEBRUARY, 1973 No. 1



CARTAS A «La Vanguardia»

LA RESTAURACION DEL MONASTERIO DE ST. LLORENÇ DEL MUNT

Sr. Director de «La Vanguardia»

En la edición de este periódico correspondiente al domingo 26 de marzo pasado, apareció una carta que, bajo el título de «La restauración del Santuario de St. Llorenç del Munt», firmaba F. Gurri Serra.

El señor Gurri Serra, en la mencionada carta, hace referencia a una crónica mía como corresponsal en Tarrasa, publicada el día 22 del mismo mes de marzo, sobre la visita efectuada a Sant Llorenç del Munt por el arquitecto director del Ministerio de Información y Turismo. En la crónica se decía, entre otras cosas, que dicho arquitecto «como consecuencia de la reciente visita efectuada por el ministro señor Sánchez Bella, vino a estudiar la posibilidad de restaurar el cenobio benedictino existente en "La Mola" y la instalación de un parador de turismo en los bellos parajes de la montaña de Sant Llorenç». Con relación a lo que antecede, dice el señor Gurri en su carta, que desea, «a la vez que rectificar un error, "dar al César lo que es del César"», indicando a continuación que «lo que el Ministerio de Información y Turismo tiene en estudio es, independientemente de alguna otra construcción similar en algún otro paraje de la montaña, la adecuada restauración y habilitación de la hospedería existente en "La Mola", con[illegible] nues

Archivo 7-1-79

UNA OPINION SOBRE LA BIBLIOTECA CENTRAL

Sr. Director de «La Vanguardia»

En mi calidad de investigadora sobre temas botánico-bibliográficos he tenido la oportunidad de visitar y trabajar en la Biblioteca Central de Barcelona. La primera vez la visité en julio de 1971 y, ultimamente, he vuelto en marzo de 1972. En ambas ocasiones he quedado sumamente impresionada por la magnífica labor que están realizando el personal y cuerpo técnico de dicha biblioteca.

Podría destacar el servicio excelente que se presta a los que vienen a trabajar en este centro. Todas las personas que he tratado están bien preparadas para su trabajo, sea como bibliotecarios, ayudantes, técnicos, como en el servicio fotográfico, etc. Y todos atienden a los que acuden a la biblioteca con cortesía e interés y lo hacen rápida y eficazmente.

Todo el ambiente de la biblioteca es tal que uno trabaja con gran placer. La mayoría de los que vienen a la biblioteca son estudiantes y me dieron la impresión de que trabajan con gran devoción y seriedad. En fin, la Biblioteca Central de Barcelona puede considerarse a la par con las grandes bibliotecas, no solamente de España sino con las de otros países de Europa y América y me da satisfacción poder expresar mis impresiones a los lectores de su periódico.

También cabe llamar la atención sobre la magnífica obra que se ha hecho al abrir otra vez el jardín botánico que, en estos días, se puede contar no solamente como una maravilla de Cataluña, sino también como un tesoro de todo el pueblo del país.

Ida K. LONGONAM
(Hunt Botanical Library, Carnegie-Mellon University, Pittsburgh Pennsylvania)

LA MUERTE DE CASTELAR

Sr. Director de «La Vanguardia»

Me permito molestar su atención con estas líneas para decirle que en el número del día 16-3-72 aparece un artículo sobre don Emilio Castelar, firmado por Fernando Barango Solís. En dicho artículo, y casi al principio, se dice que don Emilio Castelar murió en Madrid, cuando en realidad el óbito de tan ilustre político se produjo en la casa propiedad de mis abuelos, ya fallecidos, don José Servet Magsnis y doña Encarnación Spottorno Sandoval, en la villa de S. Pedro del Pinatar (Murcia), en una finca denominada «Hotel S. Sebastián», a 1 km. escaso de la anteriormente citada villa. En dicha casa puede todavía, si sus actuales dueños no la han eliminado, observarse la lápida que colocada debajo del balcón de la habitación mortuoria, perpetúa este histórico acontecimiento.

Fernando SERVET SANCHEZ
(Murcia)

Amer. J. Bot. 60(8): 771–787. 1973.

FLORAL STRUCTURE AND EVOLUTION IN LOPEZIEAE (ONAGRACEAE)[1]

RICHARD H. EYDE AND JUDY T. MORGAN[2]
Department of Botany, Smithsonian Institution, Washington, D.C. 20560

ABSTRACT

The Lopezieae present an interesting mixture of ancestral and derived characters: some members of the tribe retain the basic onagraceous chromosome number ($n = 11$), but the flowers are advanced in that they are mostly zygomorphic and always have a two-merous androecium. Species differ in the position of the nectaries, also in the way in which floral parts are united above the inferior ovary. These differences, when analyzed with information from a new monograph of the Lopezieae, provide the basis for a phylogenetic tree. It is inferred that ancestral Lopezieae were bird-pollinated woody perennials with regular flowers, two fertile stamens, and no floral tube distal to the ovary. Evolutionary events accompanying the emergence of modern taxa included abortion of the abaxial stamen (all surviving Lopezieae except *Lopezia lopezioides*), development of an epigynous floral tube (*L. riesenbachia, L. semeiandra*), decrease in floral symmetry without conversion to insect pollination (in two independent lines), and decrease in floral symmetry with conversion to insect pollination (in at least two independent lines). The prominent tubercles on upper petals of certain insect-pollinated species apparently evolved from the less prominent swollen areas still present in some of the bird-pollinated species. The tubercles and an associated snapping mechanism arose in response to increasing selection for fly pollination. Densely staining areas in some specimens may be osmophores; if so, scent plays a supplementary role in the orienting of insects to the upper petals. Interstaminal nectaries and the absence of a floral tube link the Lopezieae to *Ludwigia*; the relationship of these two taxa to *Epilobium* is presently unclear. Fossil records indicate that the Onagraceae had evolved by the beginning of the Tertiary Period and that the *Ludwigia* line is very old. The family's ancestral features are retained to a greater degree in *Fuchsia*, however, than in *Ludwigia*.

WE KNOW NO previous anatomical work on flowers of the onagraceous tribe Lopezieae Spach save that of Baehni and Bonner (1948), who studied five or six species obtainable from botanical facilities in Geneva, Switzerland. With one exception, these specimens were known to Baehni and Bonner only as herbarium specimens. The investigation we report here was carried out in conjunction with a taxonomic revision of the Lopezieae by Plitmann, Raven, and Breedlove (In press). Aided by these monographers, we made observations on 18 of the tribe's 22 species, and most of our work was done with flowers preserved in FAA or other alcoholic preservative. Another difference between our investigation and the earlier one is that Baehni and Bonner were primarily concerned with floral vasculature and its interpretation, whereas we emphasize evolutionary changes in floral symmetry and the differing ways in which epigynous floral parts are united.

Peter Raven coordinated our efforts with those of his research group, passing specimens from worker to worker, providing us with pollination observations and with other data obtained by his group, and incorporating into their monographic study inferences resulting from our investigation. Thus, our work was aided substantially, though indirectly, by a series of grants from the National Science Foundation to Raven and by specimens that personnel of the University of California Botanical Garden (Berkeley) collected for Raven. Raven also transmitted to us a set of slides prepared by Sherwin Carlquist at a time when Carlquist planned his own anatomical investigation of the Lopezieae. Having put aside the Onagraceae, at least temporarily, for other research interests, Carlquist generously allowed us free use of these preparations, which included two species we might not otherwise have studied.

Alcoholic collections from which our slides were prepared are listed in Table 1. We also sectioned dried flowers of two rare species known (when our investigation began) only as herbarium collections; *Lopezia hintonii* Foster, *Hinton 14902* (US), Guerrero; and *L. suffrutescens* Munz, *Ortega 4264* (US), Durango. Among Carlquist's preparations were sectioned flowers of two additional taxa: *L. cornuta* S. Wats., *Breedlove 15547*

[1] Received for publication 27 November 1972.
[2] Formerly a Collaborator in the Smithsonian Institution's Department of Botany. Present address: 3220 Wellington Road, Alexandria, Virginia 22302.

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3181. AFRICA, TROPICAL; ROOTS AND ROOT SYSTEMS OF TROPICAL TREES; JAN JENIK.
3182. ANTARCTIC, FALKLAND ISLANDS, SOUTH GEORGIA, SUBANTARCTIC; TAXONOMIC; IDENTIFICATION OF ALIEN SPECIES; DAVID W.H. WALTON.
3183. ASIA, SOUTHEASTERN; N. AMER., EASTERN; HISTORY OF DISJUNCT FLORAS; HUGH H. ILTIS.
3184. ASIA, AFGHANISTAN, ALPINE; BIOGEOGR, GEOBOT, ECOL, PHYTOSOCIOL; VEGETATION; HIGH HINDUKUSH AND OTHER AFGHAN MOUNTAINS; SIEGMAR-W. BRECKLE.
3185. ASIA, CHINA; TAXONOMIC; REVISION OF E. ASIAN TAXA AND CATALOG OF NAMES PUBLISHED BY HECTOR LEVEILLE; L.ANDRE LAUENFR.
3186. AUSTRALASIA, AUSTRALIA; SURVEY OF NATURALLY OCCURRING COUMARINS FROM THE AUSTRALIAN FLORA; E.V. LASSAK.
3187. CARIBBEAN, WEST INDIES; ILLUSTRATED EDUCATIONAL TEXTS ON SPECIALIZED FLORISTIC GROUPS OF ECONOMIC PLANTS SUCH AS WEEDS, POISONOUS PLANTS, AND ECOLOGICAL UNITS, E.G. SEASHORE, COASTAL THICKETS, FORESTS; C.DENNIS ADAMS.
3188. EUROPE; PHYSIOL; PHANEROGAMS; JAROSLAV PAZOUREK.
3189. N. AMER., USA, ALABAMA; CONSERV; RARE AND ENDANGERED PLANTS; ROSS C. CLARK.
3190. N. AMER., USA, MINNESOTA; OREGON; WASHINGTON; PARASITIC HYMENOPTERA OF APHIDIDAE (MINNESOTA, WASHINGTON & OREGON); HOST AND HOST'S NATIVE PLANTS; ALBERT E. GRABLE.
3191. N. AMER., USA, OREGON; WASHINGTON; LEPIDOPTERA (WASHINGTON & OREGON); HOST-PLANT ASSOCIATES ON NATIVE HOSTS; ALBERT E. GRABLE.
3192. N. AMER., USA, ROCKY MOUNTAINS, SAN JUANS; DENDROCHRONOLOGY OF AVALANCHE PATHS, DETERMINATION OF DATES AND INTENSITIES OF SLIDES; BERNADETTE R. MENHUSEN.
3193. S. AMER., PERU, SOUTHERN; FLORISTIC; BOTANICAL EXPLORATION OF THE ALTO MADRE DE DIOS BETWEEN CUZCO AND MADRE DE DIOS DEPARTMENTS; CESAR J. VARGAS CALDERON.
3194. WORLD; HISTORICAL; INDEX OF COLLECTORS OF NON-VASCULAR CRYPTOGAMAE; GENEVA SAYRE.

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3197. STOMATA OF VASCULAR SPOROPHYTES AND BRYOPHYTES; ONTOGENY, PATTERN DEVELOPMENT, TAXONOMIC AND EVOLUTIONARY IMPLICATIONS; WILLARD W. PAYNE.
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BIBLIOGRAPHY

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3200. COMPILATION FOR COMPUTER USE THE PRE-PLEISTOCENE SPORES, POLLEN AND MICROPLANKTON REPORTED IN PUBLISHED LITERATURE, WORLD WIDE; GERHARD O.W. KREMP.
3201. INDEX TO "THE BRYOLOGIST" VOL. 61 - PRESENT; RAY STOTLER.
3202. BIBLIO-BIOGRAPHY OF CENTRAL EUROPEAN PHYCOLOGY; DIETER MOLLENHAUER.
3203. BIBLIOGRAPHY OF THE BOTANY OF SIKKIM; K.M. MATTHEW.
3204. PUBLI BIBLIOGRAPHIA HUNTIANA; ONE OF MANY COLLABORATORS ON THE COMPILATION OF EVERYTHING PUBLISHED IN BOTANY FROM 1730-1840; IDA KAPLAN LANGMAN.
3205. ANNOTATED BIBLIOGRAPHY OF FUNGI DESCRIBED BY C. SPEGAZZINI; MARIE L. FARR.
3206. BIBLIOGRAPHIES ON REGIONAL NATURAL & HUMAN HISTORY, BRITISH COLUMBIA; MARCUS A.M. BELL.
3207. BIBLIOGRAPHIES ON RESEARCH WORK RELATED TO FOREST MANAGEMENT; MARCUS A.M. BELL.
3208. BOOK OF SAMPLES OF HANDWRITINGS AND BIOGRAPHICAL SOURCES FOR BOTANISTS IMPORTANT IN THE DEVELOPMENT OF SOUTH AFRICAN TAXONOMY (WITH H.B.R. TOLKEN, J.P. BOURDOT, M.D. GUNN); J.P. JESSOP.
3209. BIBLIOGRAPHY OF ANNUAL RESEARCH IN BOTANY IN BELGIUM; JACQUES LAMBINON.
3210. BIBLIOGRAPHY, SCIENTIFIC BIOGRAPHY, INDEX OF TAXA DESCRIBED BY L.D.V. SCHWEINITZ; DONALD P. ROGERS.
3211. TAXONOMIC LITERATURE; FRANS A. STAFLEU.
3212. LISTS OF AUTHORS AND COLLECTORS FOR FLORA INDICA AND FLORA IRANICA; RALPH R. STEWART.
3213. ANNOTATED BIBLIOGRAPHY OF REVISIONARY STUDIES IN COMPOSITAE; TOD F. STUESSY.

pendence.

But the Hindus were returning, and already some of the badly defaced interiors were boasting ornate religious images.

Search for Parents

Dr. Krippendorff and his wife left Philadelphia at the end of January to look for her parents.

He said they had read published reports that the Pakistanis were conducting an inquisition against Bengali intellectuals, and they had received no word from her family in months.

Mrs. Krippendorff's father is a prominent Bengali surgeon.

En route, they received word that her parents were alive and well. Mrs. Krippendorff is still with them.

Both had been involved in American efforts on behalf of Bengali independence, and "we wanted to see whether it was worthwhile."

Meet Sheik Mujib

Dr. Krippendorff and his wife met with Sheik Mujib toward the end of their journey, and the professor said his main purpose in asking for the meeting was to assure the prime minister that there is tremendous support in the United States for the Bengali cause.

He said he told Sheik Mujib that the Nixon administration's pro-Pakistani attitude during the war was not representative of American sentiment.

"He was relieved to hear he had the support of the American people. He is actually very open to the West. This (the Nixon stance) was the greatest disappointment. Since then (Dr. Krippendorff's conversation), many people have said this to him."

Dr. Krippendorff remarked that he was surprised to find how quickly Benagli business life had been restored to normal after the war.

"Everyone just started

[illegible] Arrest Leads

[illegible] ground forces, backed by tanks, artillery and planes, today began to withdraw from a 40-square-mile region in Lebanon where they yesterday occupied five towns and seized control of a major highway, Israeli Radio reported.

The fighting had continued into today between Palestinian commandos and Israeli troops in the Arkoub region, which has been a stronghold of the Al Fatah guerilla organization.

Israeli Radio reported between 50 and 60 guerillas killed and 60 to 70 wounded at a loss of five Israelis wounded.

"Israeli tanks, army, infantry and engineering units are on their way home," the radio said.

[Lebanon Prime Minister Saeb Salam said that "unless the withdrawal is completed today, the army has orders to go into action," the Associated Press reported.]

Israel says there are 5,000 guerillas based in the area and that the Lebanese government should assume its responsibility and crack down on them.

The fighting in Lebanon began Friday after guerillas ambushed and killed an Israeli couple driving along a frontier road Wednesday and killed two Israeli soldiers and wounded six the next day.

UN Resolution

The United Nations Security council met in emergency session during the night, and early today it unanimously demanded that Israel "desist and refrain" from its action against Lebanon and immediately withdraw its forces. There was no indication the UN would take any action to back its resolution by force.

The resolution did not mention the guerilla raids into Israel. A provision "deploring all actions which have resulted in the loss of innocent lives" failed to get the necessary nine votes. China, Guinea, Sudan and Yugoslavia voted against it and the Soviet Union, India and Somalia abstained.

The United States, Britain, France, Argentina, Belgium, Italy, Japan and Panama voted for the measure.

After the resolution was passed military headquarters in Tel Aviv said Israeli troops had held their fire through six mortar attacks from Syria during the night.

There were no casualties from the mortaring of Nahal Golan, an agricultural settlement of active duty soldiers on the occupied Golan Heights, or from the attacks on forces in Kuneitra, Ramat Magshimim or an army patrol near Buqata.

In Damascus a guerilla spokesman said Palestinian guerillas attacked the Israeli Tibbin settlement in the Golan Heights today, destroying military and civilian installations. He said 50 Israelis had been killed or wounded.

Syria became involved in fighting yesterday when its antiaircraft guns opened up on Israel Phantom and Mirage jets over the Golan Heights. Israel said it fired three barrages into Syria in retaliation for three Arab attacks.

Lebanese ground forces also apparently were involved in the fighting in the guerilla stronghold. A government communique said Lebanese army tanks were fighting Israeli armor.

Although allied with the Arabs, Lebanon took no part in the 1967 fighting and generally had managed to keep out of the conflict until the Palestinian guerillas began setting up their bases in Lebanon and striking across the border into Israel.

Reports from Lebanon said Israeli ground troops, supported by air and artillery bombardments, captured the five villages yesterday in the biggest offensive it has launched since 1967. Damascus radio said Israeli armor had surrounded the village of Habbariyeh and controlled the villages of Kfar Shouba, Kfar Hamam, Rachaya al Foukhar and Freidess.

An Israeli communique said Israeli jets raided what was described as general headquarters for the Fatah guerillas at Nabatyat-el-Tanta, nine miles above the border, with at least two direct hits reported. The guerillas said the jets hit nearby Palestinian refugee camps and killed 12 children in the 3,000-inmate camps.

Building a Road

Guerillas reported that Israeli bulldozers crossed the border from the Golan Heights under the protection of Israeli tanks and continued work on a new road into the Arkoub area on the Lebanese slopes of Mt. Hermon, the Associated Press said.

WHAT DOES [illegible]

Science Vol. 148 #3669, 23 April 65

tundras are proposed as optimal environments for early hunter-gatherer populations. Paleoenvironmental understanding of the Pleistocene interglacials remains a problem because these have generally (and incorrectly) been taken to be uncomplicated, warm-dry intervals, the main interest in them being in the function that they serve as stratigraphic markers. The importance of controlling fire—known since the Elster II glaciation at Choukoutien, China, and Torralba, Spain, about a half-million years ago—was that it allowed human penetration of mid-latitudes during cold periods. The environmental changes that occurred in Western Europe at the end of the Pleistocene, between 11,500 and 7500 B.C., marked the disappearance of the reindeer and mammoth, and the absence of these animals is viewed as the cause of a cultural crisis through food shortage, with consequent severe decline in numbers of human occupants of the area. The much-argued topic of man's influence as the agent responsible for the extinctions, at the end of the Pleistocene, of such animals as the elephant, rhino, steppe bison, cave bear, cave lion, and spotted hyena is reviewed, and human agency as a main factor is discounted. Climatic change, especially desiccation, as a factor to account for agricultural dispersals from the Near Eastern hearth area is seen to have little weight, and the alternatives of land-shortage owing to shifting agriculture and chronic overpopulation are proposed as more likely causes for this diffusion.

This volume, in attempting a synthesis of data of a variety and magnitude not heretofore attempted, most effectively shows the extent of our present knowledge of man-land relationships in prehistory, and, with respect to future investigation, it will no doubt be an important force in showing where the lacunae lie and the methods that are available to fill them. One finishes reading this book with a renewed sense of the greatness of the accomplishment of human survival, and an awareness of how little understood is the 2-million-year run of man's history. One also wonders where we have gone astray in our failure to persuade the public that a knowledge of human history is as useful and important, and equally as interesting, as a trip to the moon.

ROBERT F. HEIZER

Department of Anthropology, University of California, Berkeley

Flowering Plants of Mexico: A Literature Survey

A Selected Guide to the Literature on the Flowering Plants of Mexico. Ida Kaplan Langman. University of Pennsylvania Press, Philadelphia, 1964. 1015 pp. $25.

This bibliography is the most important event in Mexican botany since Standley's *Trees and Shrubs*. In what amounts to both a love of labor and a labor of love, this *Guide* to the literature of Mexican seed plants has been arranged by the author and fully cross-indexed as well. There is a topical four-column index of 156 pages. Many authors (for example, Berlandier, Blake, Liebmann, Orcutt, and Purpus) take on a new dimension; for others the enormity of the bibliographic problem is only suggested. Books, articles, theses, manuscripts, archivia, and trivia—all come in Langman's purview. Some authors have supplied addenda; Ruggles Gates corrects his paper published 50 years ago. Librarians' comments spice the entries *passim*: See Miss Meeder's estimate of Orcutt. Just browsing will be rewarded.

Accuracy, said A. E. Housman, is a duty and not a virtue. Yet a bibliography that is both scholarly and meticulous will not be free from error. Unfortunately, this volume's narrow margins will not accommodate corrections, and, worse, rebinding will be a catastrophe. The indexes, like directions given by the man at the filling station, will prove to be approximate at best.

Sixty years ago J. Christian Bay insisted that the urgent needs of botanical bibliography would be solved only by the single-minded enthusiasm of individuals. The human mind remains irreplaceable in the face of mechanical devices often deemed the salvation in the compilation of a bibliography like Langman's. A computer has a medulla oblongata but lacks a cerebrum. The Swiss bibliographer Haller set forth the author's contribution, not the minutiae of the book's torso. Langman, like Haller, is concerned with what the book offers the reader. For society it is fortunate that such bibliographers have not gone with the chimney sweep. *Labor ipse voluptas*. Every user will be grateful to the foundations that have intermittently supported the enterprise, but most grateful to the compiler for her persistence.

JOSEPH EWAN

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Evolution of Life on the North American Continent

Stratigraphy and Life History. Marshall Kay and Edwin M. Colbert. Wiley, New York, 1965. 775 pp. $9.75.

This profusely illustrated book attempts to set forth for beginning students the principles of stratigraphy and to give a summary of the main events in the evolution of life and of the North American continent. Either task is formidable in itself, and both call for skillful blending and summarizing of a vast and confusing array of data if a coherent and meaningful story is to emerge. A prodigious amount of information is assembled in this book, but assembled in such a poorly organized manner, and with so many sidelights inserted, that the point is often lost. The stratigraphic principles are obscured, and the main historical events tend to be isolated and rather meaningless.

The first 400 pages are devoted to presentation of stratigraphic principles, which are intertwined with summaries of the history of the Precambrian, Paleozoic, and part of the Mesozoic Eras. The principle of superposition of strata is emphasized in early chapters on Precambrian rocks, together with a somewhat cryptic treatment of the problems of correlation of nonfossiliferous rocks and dating by means of isotope geochemistry. The principle of uniformitarianism, the basis for all stratigraphic and paleoecological interpretation, is not mentioned. Rock-stratigraphic and time-rock units are introduced in a discussion of Cambrian rocks, but clear distinctions and good examples of these types of units are not given. Faunal zones are not defined until much later in the book. Sedimentary and biologic facies are illustrated in a series of chapters, drawing on examples from Ordovician and younger Paleozoic rocks. Tectonic control of sedimentation is suggested in a discussion entitled the "Taconian revolution."

The second half of the book is a more straightforward presentation of

Ida: No doubt you've seen this "beaming review". Congrats. Eric

H.I. Archives #179

Zelle weiter aus, Kapitel XI geht auf die Beziehungen zwischen den Zellen ein, Kapitel XIII befaßt sich mit der Evolution der Zelle und ihren Differenzierungen im Verlaufe der Entwicklung bei Pflanze und Tier, wobei auch weitgehend hypothetische Bereiche kurz gestreift werden. Den Abschluß bildet die quantitative Erfassung der Zelle. Jedes Kapitel schließt mit einer Zusammenfassung. Das Literaturverzeichnis hat den imponierenden Umfang von 29 zweispaltig bedruckten Seiten. Diese kurze Inhaltsangabe erschöpft aber nicht annähernd den Reichtum des Gebotenen.

Zu bedauern ist, daß der ohnehin in seiner komprimierten Form äußerst schwierige Stoff in oft vom sprachlichen Ausdruck her recht unzulänglicher Weise dargeboten wird. Auch wirken sich häufige Druckfehler gelegentlich störend aus. Ein Beispiel soll für viele stehen, wie sie sich fast auf jeder Seite finden. Seite 10: „Die Membran umhüllt stets einen Raum, geht also an allen Seiten ineinander über." Ineinander übergehen können nur mehrere verschiedene Dinge, die Ausdrücke sind also unrichtig gebraucht. Auch sachlich sind einzelne allzu grobe Vereinfachungen nicht vertretbar, so etwa, wenn es auf S. 112/113 heißt: „Ferner kann es bei Pilzen vorkommen, daß nach der Plasmaverschmelzung der Gameten die Kernverschmelzung noch nicht eintritt, sondern sich ein Dikaryon (= Heterokaryon) ausbildet." Die Gleichsetzung von Dikaryon und Heterokaryon ist nur dann möglich, wenn erwiesen ist, daß die beiden Kerne verschiedenes genetisches Material enthalten. Besonders unangenehm fällt ein Druckfehler am Einband auf: Es ist hier von „Elektronenmikroskopien" statt „Elektronenmikrographien" die Rede.

Alles in allem haben wir es mit einem als Einführung kaum geeigneten, als Nachschlagewerk aber äußerst reichhaltigen Buch zu tun, das jedem Biologen zweifellos viel Neues zu bieten hat und in keiner einschlägigen Bibliothek fehlen dürfte.

HARALD RIEDL.

Kumerloeve, H.: „Ergänzungen zur Avifauna Kleinasiens". Bonner Zoologische Beiträge, Heft 3/4 (1966), Seite 257–259.

Verfasser, dem wir durch seine Arbeit „Zur Kenntnis der Avifauna Kleinasiens", Bonner Zoologische Beiträge, 12, 1961, Sonderheft, eine auf sorgfältigem Literaturstudium und eigener feldornithologischer Tätigkeit beruhende umfassende und gründliche Darstellung der Vogelwelt Kleinasiens verdanken, ist ständig bemüht durch weitere Beiträge diese Avifauna up to date zu halten. Dies gilt auch für vorliegende Abhandlung, nach der eine Reihe für die Türkei bisher unbekannter Vögel diesem Gebiet hinzugerechnet werden müssen. Insgesamt handelt es sich um 13 Arten. Die Gesamtartenzahl der türkischen Vogelwelt beläuft sich demnach auf 384 gesicherte Formen, davon 244 brütende bzw. ehemals brütende, 18 wahrscheinlich und 22 vielleicht brütende Arten, ferner 100 Gastspezies. Weiterhin müssen 18 Arten als fraglich genannt werden. Bei dem großen Interesse, daß man zur Zeit den zoologischen Verhältnissen der Türkei entgegenbringt, sind die Arbeiten KUMERLOEVES als wichtige Bausteine zu ihrer Erforschung zu werten.

GERTH ROKITANSKY.

Langman, Ida Kaplan: A Selected Guide to the Literature on the Flowering Plants of Mexico, 1964, 1015 pp. — University of Pennsylvania Press, Philadelphia 4. USA. $ 25,—.

Diese Bibliographie ist ein Führer durch die Literatur über die mexikanischen Blütenpflanzen seit der Entdeckung und Eroberung Mexiko's im 16. Jahrhundert. Besondere Berücksichtigung findet die Literatur, die sich auf die Identifizierung, Klassifikation und Verbreitung der Pflanzen bezieht, Probleme, für die sich vor allem die Systematiker und Phytogeographen interessieren werden. Aber auch jene Literatur wurde berücksichtigt, die viele andere Gebiete betrifft, vor allem die Geschichte der Botanik in Mexiko, darunter auch die Biographien der zahlreichen Forscher, die in Mexiko gearbeitet haben, ferner Reiseberichte und deskriptive Literatur, in der auf das Pflanzenleben in Mexiko eingegangen wird. Viele Sachwörterbücher der einheimischen Sprachen Mexiko's, die Pflanzennamen enthalten, werden angeführt und alle Arbeiten, die sich auf die Verwendung von Pflanzen in der Landwirtschaft, Gartenkultur, Medizin, Pharmakologie und Industrie beziehen, zitiert. In Bezug auf Systematik und Phytogeographie scheint die vorliegende Bibliographie ziemlich vollständig zu sein. Die Literatur über andere Gebiete der Botanik ist, soweit sie in Mexiko publiziert wurde, sicher absolut vollständig. Manuskriptarbeiten wurden, wenn sie irgendwo katalogisiert und erreichbar waren, auch aufgenommen. Bei der Zusammenstellung dieser Bibliographie wurden die Kataloge aller größeren Bibliotheken der Vereinigten Staaten mit nur ganz wenigen Ausnahmen, ferner alle Bibliotheken Mexikos eingehend ausgewertet.

In der Einleitung gibt die Vfin. eine kurze Übersicht über die Durchführung ihres Werkes, zu dem sie während eines einjährigen Aufenthaltes in Mexiko angeregt wurde. In einem kurzen Kapitel wird zuerst auf die wichtigsten bibliographischen, die mexikanische Flora betreffenden Arbeiten hingewiesen. Es folgt eine Liste der von der Vfn. bei ihren bibliographischen Studien benützten Bibliotheken. Dann folgen zwei Verzeichnisse der verwendeten Abkürzungen. Den Schluß bildet eine Liste der in der Bibliographie berücksichtigten Zeitschriften. Den meisten Artikeln im Hauptteil des Werkes werden kurze Angaben über ihren Inhalt beigefügt. Das in vier Spalten gedruckte Sachregister umfaßt 156 Seiten.

Allen Botanikern, die sich mit irgendwelchen, die mexikanischen Blütenpflanzen betreffenden Problemen beschäftigen, wird das vorliegende Werk wertvolle Dienste leisten und viel Zeit ersparen.

FRANZ PETRAK.

Lengerken, H. v.: Insekten. — Sammlung Göschen, Das Tierreich IV, 3 (594). Walter de Gruyter, Berlin 1966. 140 Seiten, 59 Abbildungen. DM 3,60.

In der beliebten und handlichen Reihe der „Sammlung Göschen" sind aus der berufenen Feder H. v. LENGERKENS als Band 594 in zweiter, neubearbeiteter Auflage die „Insekten" erschienen. Es handelt sich um eine gedrängte, gut bebilderte und leicht verständliche Übersicht über den gesamten äußeren und inneren Körperbau, die Fortpflanzung, die postembryonale Entwicklung und die Beziehungen der Insekten zur Umwelt. Mit sicherem Blick für das Wesentliche ist eine Fülle von Tatsachen ausgewählt und anschaulich zusammengestellt. Im anschließenden systematischen Teil, der bei jeder kurz gekennzeichneten Familie ein oder zwei Arten als Beispiele nennt, sind allerdings der gedrängten Darstellung einige Ordnungen zum Opfer gefallen. Es entspricht auch nicht den neuen Erkenntnissen, wenn z. B. die Blattodea und Mantodea einerseits und die Phasmida, Saltatoria und Dermaptera andererseits als Unterordnungen zur Ordnung der Orthoptera zusammengefaßt werden, da es sich hier jeweils um Ordnungen zweier getrennter phylogenetischer Reihen handelt. Im Ganzen gesehen ist das Büchlein jedem Naturfreund bestens zu empfehlen, da es ihm auf viele Fragen Auskunft geben kann.

MAX BEIER.

Martin, Rudolf und Saller, Karl (1966): Lehrbuch der Anthropologie in systematischer Darstellung. Dritte, völlig umgearbeitete und erweiterte Auflage. Band IV (Lieferungen 15 bis 18 und Einband). Verlag Gustav Fischer, Stuttgart. Seiten 2417 bis 2999, Abbildungen 1070 bis 1253. Subskriptionspreis DM 125,50.

Der Band IV des Lehrbuches beinhaltet die Konstitutionsanthropologie und die angewandte Anthropologie. Nach einer Klarlegung der Grundbegriffe der Konstitutionsanthropologie werden die Konstitutionstypen (Geschlechtstypen, Keimblattypen, vegetative Typen und Partialkonstitutionen) behandelt. Zahlreiche Bilder und Häufigkeitspolygone erleichtern das Verständnis der Darlegungen. Ein weiteres Kapitel ist dem Einfluß der Umwelt auf die Konstitution gewidmet, wobei die Wirkung der Ernährung und des Klimas, von Infektionen und Strahlungen, des Berufes und der Sportausübung sowie von Heilmitteln auf den Körper und die Psyche des Menschen untersucht werden. Die Behandlung der Alterskonstitutionen, der Physiognomik, der Beziehungen von Konstitution und Rasse sowie des Personsbegriffes beschließen den Abschnitt über die Konstitutionsanthropologie. Die Ausführungen über die angewandte Anthropologie werden durch die Aufzeigung der Möglichkeiten eingeleitet, die sich für den Menschen bei der Gestaltung seiner Alltagsumwelt unter Berücksichtigung der anthropologischen Erkenntnisse ergeben. Im Anschluß daran erfolgt die Beschreibung der Methoden des serologischen und des anthropologisch-erbbiologischen Gutachtens bei Vaterschaftsprozessen im Rahmen der gerichtlichen Anthropologie. Bei der Behandlung des serologischen Gutachtens werden die Systeme mit „absolutem" Beweiswert und die Systeme, die nur einen Wahrscheinlichkeitsausschluß erlauben, besprochen, desgleichen die Ausschlußchancen und die positiven Hinweise auf eine Vaterschaft. Es folgt die Darlegung der Prinzipien des auf einer polysymptomatischen Ähnlichkeitsdiagnose beruhenden anthropologisch-erbbiologischen Gutachtens, seiner Erfolgsaussichten und seiner Beweiskraft in der Rechtsprechung. Am Beispiel eines „Viererfalles" (Mutter, Kind, Beklagter, Zeuge) mit Bildunterlagen und Daktylogrammen wird abschließend die Praxis eines solchen Gutachtens erläutert. Im nächsten Abschnitt wird die Bevölkerungsbiologie und die Eugenik (Erbhygiene) behandelt. Im ersten Kapitel über die Bevölkerungslehre wird insbesondere auf die Biologie der Rassen und Völker eingegangen und vor allem der Unterschied in der Vermehrung untersucht, der durch verschiedene Faktoren wie Kon-

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БОТАНИЧЕСКИЙ ИНСТИТУТ ИМЕНИ В. Л. КОМАРОВА АКАДЕМИИ НАУК СССР

УЧЕНЫЙ СЕКРЕТАРЬ

Ленинград П-22, ул. проф. Попова, 2. Тел. В-2-15-65.

26 ИЮНЯ 7
196 г.

Mrs. Ida Langman
I N S Project
Museum of Natural History
Smithsonian Institution
Washington 25, D.C. - 20560
U.S.A.

Дорогая миссис Лангман!

Мне было очень приятно получить Ваше письмо от 19 апреля. Я не ответил Вам сразу из-за командировок, последовавших одна за другой.

Моя короткая рецензия имела целью прежде всего информировать советских ботаников о новом библиографическом справочнике. Но я счел своим долгом дать и оценку Вашему огромному труду. Ведь только те, кто сами занимаются библиографией, могут по настоящему оценить мозольный труд библиографов. Один из наших известных арабистов И. Крачковский сказал как-то, что ученые делятся на эгоистов и альтруистов. К последним он отнес ученых библиографов, библиотекарей и архивистов, без весьма неблагодарного труда которых невозможна деятельность всей остальной ученой корпорации.

То, что Вы наша соотечественница, мне было ясно. Думаю, что Вам будет приятно посетить родину,, которую Вы оставили еще девочкой. А приехав в Ленинград, Вы, конечно, побываете и в нашем институте, где Вас будут рады видеть.

С пожеланиями всяческих успехов,
искренне Ваш /Д. В. Лебедев/

Надниях вышлю Вам отдельный оттиск моей рецензии, а также некоторых других публикаций.

Тип. БИН. Зак. 83-250. 25.VIII.66 г.

(Translation from Russian By S.B.)

(1) → Botanical Institute (named in honor of V.L. Komarov, Acad. of Science, USSR.
address:
(3) Leningrad P-22.
U.S.S.R.
THE [Scholarly] SECRETARY
(2) Prof. Popov's Street, No 2.
Tel. B-2-15-65

26 June 1967

Ms. Ida Longmon
INO Project
Museum of Natural History
Smithsonian Instit...on
Washington 25, D.C. - 20560
USA

Dear Ms. Longmon!

I was very glad to receive your letter of April 19. I did not answer it immediately because of several trips on business which followed one after another.

My short review was primarily to inform Soviet botanists about a new bibliographical reference work. However, I also considered as my duty to give an evaluation of your enormous work. It is only those who themselves are bibliographers, can properly appreciate the "back breaking" (original: callous forming) labor of the bibliographer. One of our noted arabists, I. Krachkovski, once said that scholars can be divided into egoists and altruists. In the latter category he placed scholars-bibliographers, & librarians, and archivists, without whose rather ungrateful labors, the work of all the rest of the scholarly profession is impossible.

The fact that you are my compatriot has been evident to me. I think it would be pleasant for you to visit your native land which you had left as a little girl. And if you come to Leningrad, you will, of course, visit us in this Institute, where we shall be happy to see you.

With the best wishes for all the success,

Sincerely yours,

D.V. Lebedev

In a few days I am sending you a reprint of my review together with some other publications.

Dear Mrs. Langman:

I was very pleased to receive your letter of 19 April. I did not answer in this connection because of ~~xxxxx~~ duties which have piled up one on the other.

My short review had the point first of all to inform Soviet botanists about the new bibliographic handbook. But I considered it my ~~x~~ responsibility to give also an evaluation of your enormous work. Of course only those who occupy themselves with bibliography could really evaluate the difficult work of bibliographers. One of our ~~xxxxxxxxx~~ famous Arabists I. Krachkovskiy said somehow that scholars ~~xxxxxxxxxxxxxxx~~ are divided into egoists and altruists. To the latter he referred scientific bibliographers, librarians, and archivists, without whose extremely thankless work ~~xxxxxxxxxxxxxxx~~ the activities of all the rest of the scholarly body (community) are impossible.

It was clear to me, then, that you are a fellow countrywoman. I think that you will be ~~xxxxxx~~ admitted as a visitor to the native country which you left while a young girl. But having arrived in Leningrad, you, of course, ~~xxx~~ must stay for a while ~~xx~~ our institute, where ~~xxxxxx~~ we will be glad to see you.

With every wish of success, sincerely yours,

Before long I will send you a reprint of my review, and also several other publications.

УДК 019.941 (720./727) : 581.145 : 58

I. C. Langman. A selected guide to the literature on the flowering plants of Mexico. Philadelphia, University of Pennsylvania Press, 1964 : 1015. (A Morris Arboretum monograph). $ 25.00. (А. К. Лангман. Путеводитель по избранной литературе о цветковых растениях Мексики. 1964).

D. V. LEBEDEV. (Review) *I. C. LANGMAN.* A SELECTED GUIDE TO THE LITERATURE ON THE FLOWERING PLANTS OF MEXICO. (1964)

Книга Айды Лангман — одна из наиболее фундаментальных работ в области мировой ботанической библиографии, опубликованных за последние годы. Кроме того, она отличается рядом ценных и интересных методических особенностей. Поэтому целесообразно ознакомить с ней советских ботаников, хотя лиц, так или иначе занимавшихся или занимающихся мексиканскими растениями, среди них довольно мало.

Работа над библиографическим указателем была начата автором еще в 1946 г. В целях сбора материала были обследованы многочисленные библиотеки США и Мексики, в том числе и частные собрания книг. Список их с условными сокращениями названий библиотек приведен на стр. 17—19. Были также просмотрены все основные библиографические указатели. Их список, включающий 359 названий, помещен на стр. 25—32. Список журналов и серийных изданий, статьи из которых включены в библиографию, вместе с принятыми сокращениями их названий занимает стр. 33—61.

Основную часть библиографии составляют описания работ, помещенные на стр. 65—857. Они расположены в алфавите фамилий авторов, а работы каждого автора — в хронологическом порядке. Библиографические описания сопровождаются во всех необходимых случаях краткими аннотациями. В них не раскрывается содержание работы в целом, а лишь выделяются те ее моменты, которые существенны для данного указателя. Для более редких изданий указывается их местонахождение (приводятся сигналы библиотек). В связи со сложностью испанских фамилий и частым употреблением их в разных формах большое место занимают отсылки к той ее форме, под которой даны все работы того или иного автора. В конце списка под рубрикой «Anonymous» помещены работы, для которых не указан автор (т. е. как действительно анонимные, так и имеющие коллективного автора). Под рубрикой «Various» объединены сборники статей.

Сами описания достаточно полные и точные, почти без исключения они основываются на просмотре материала самим составителем. В некоторых случаях слишком длинные заглавия сокращены. Заглавия русских работ даны в переводе на английский, французский или немецкий языки (в соответствии с языком резюме или содержания журнала).

Свыше 150 страниц (859—1015) занимает детальнейший вспомогательный алфавитный указатель. В нем в общем алфавите расположены латинские и народные названия таксонов, географические названия, предметные и другие рубрики, с отсылками непосредственно к фамилиям авторов публикаций и к годам их издания или же к другим рубрикам указателя. Так, вся литература, касающаяся определенного семейства, сосредоточена под его названием (с отсылками в соответствующих местах от родовых названий). Внутри же семейства сначала расположены ссылки на работы общего характера, а затем на работы, относящиеся к отдельным родам. Казалось бы, довольно сложная система рубрик благодаря ее строго алфавитному расположению и обилию перекрестных ссылок дает возможность достаточно быстро находить информацию, необходимую исследователю.

Большое значение библиографии определяется тем, что в нее включены не только описания работ, посвященных систематике и географии растений, произрастающих в Мексике, их хозяйственному значению и использованию. Здесь широко представ-

Botanicheskii Zhurnal - St. 1966.

Rough translation / S.B.

Translation from Russian

UDK 019.941 (720.727):581.145: 58

I.C. Langman. A selected guide to the literature on the flowering plants of Mexico. Philadelphia, University of Pennsylvania Press, 1964: 1015 (A. Morris Arboretum monograph). $25.00.

D.V. LEBEDEV. (Review) I.C. Langman. A SELECTED GUIDE TO THE LITERATURE ON THE FLOWERING PLANTS OF MEXICO (1964)

This book by Ida Langman is one of the most fundamental works in the field of world botanical bibliography published in recent years. Moreover, it has a number of valuable and interesting methodological features. Therefore it seems desirable to acquaint Soviet botanists with it, although the number of those who either have studied, or are studying Mexican plants is rather small.

The author began working on this bibliography in 1946. For the purpose of collecting the material, numerous libraries of the U.S.A. and Mexico were examined, including also private collections of books. Their list with appropriate abbreviations of the names of the libraries is given on pp. 17-19. All basic bibliographies have also been examined. Their list which includes 359 titles is given on pp. 25-32. A list of journals and serialized publications, articles from which were included in this Bibliography, together with the accepted abbreviations of their titles, occupy pages 33 - 61.

The main body of Bibliography consists of descriptions of works and occupies pp. 65-857. They are arranged in the alphabetical order according to authors' names and under each author they are arranged chronologically. The bibliographical descriptions are accompanied wherever necessary by brief annotations. In these are singled out only those features which are essential for the present guide, rather than giving a description of the work as a whole. In the case of rare editions their locations are indicated (with the library designations). In connection with the complexity of Spanish names and their frequent use in different forms, much space is devoted to references to the particular form which is used for all the works of a given author. At the end of the list under the heading "Anonymous" are listed works for which no athor is given (i.e. those that are actually anonymous and also those having collective authorship). Under the heading "Various" are brought together anthologies of articles.

The descriptions themselves are sufficiently complete and precise and almost without exception are based on the compiler's first hand examination of the material. In some cases, unduly long titles are abbreviated. The titles of Russian works are given in translation into English, French or German (corresponding to the language of a summary or the contents of the journal).

More than 150 pages (859-1015) are devoted to a most detailed auxiliary (index) alphabetical guide. In it are arranged alphabetically Latin and popular names of taxons (? GB), geographical placenames, objects and of other categories, always with citations of authors of publications and to the years of publications, or to the other sections of the index. Thus, all the literature on a given family is presented under its name (with references in appropriate cases to the names of the species). Within a given family, in the first place are given references to works of general

nature, and following this, to the works treating individual genera (?) genus. It would seem that a rather complicated system of classification, because of its strictly alphabetical arrangement and the abundance of cross references, would enable one quickly to find the information needed by a researcher.

The importance of this Bibliography depends not only on the inclusion of the descriptions of works which deal with the classification and geography of the plants growing in Mexico and with their economic significance and utilization. The literature dealing with morphology of Mexican plants (including anatomy, cytology and embryology), their genetics and ecology is also broadly represented.

In addition, this Bibliography presents not only the works specifically dealing with Mexico, but also publications of with a broader content having some reference to the flora of Mexico. In particular, among the works of this nature found in the Bibliography are the researches of the Soviet authors, N.I. Vavilov, E.V. Wulf, A.L. Takhtadjain, P.M. Zhukovsky, and also of many other botanists, among them the botanists of the 19th century.

This Bibliography of Ida Langman is in the Reference and Bibliography Section of the Botanical Institute named after V.L. Komarov, Ac. Sc. USSR. in honor

D.V. Lebedev

(received 4 IV 1966).

The Botanical Institue named
in honor of V.L. Komarov
Academy of Sciences, USSR.
Leningrad.

This book by Ida Langman is one of the most fundamental works in the field of world botanical bibliography published in recent years. Moreover, it has a number of valuable and interesting methodological features. Therefore, it seems desirable to acquaint the Soviet botanists with it, although the number of those who either have studied, or are studying Mexican plants is rather small.

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The main body of the bibliography consists of descriptions of works and occupies pp. 65-587. They are arranged in alphabetical order according to authors' names and under each author they are arranged chronologically. The bibliographical descriptions are accompanied wherever necesary by brief annotations. In these only those features are singled out which are essential for the present guide rather than giving desciptions of the work as a whole. In the cases of rare editions their locations are indicated with the library designations. In connection with the complexity of Spanish names and their frequent use in different forms, much space is devoted to references to the particular form which is used for all the works of a given author. At the end of thelist under the heading Anonymous are listed works for which no author is given (i.e. those that are actually anonymous and also those having collective authorship. Under the heading Various are brought together anthologies of articles.

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nisse ebenso wie aktuelle biochemische und physiologische Forschungsergebnisse berücksichtigt.

Jedem Kapitel ist ein Versuchsteil angegliedert, durch den mit insgesamt 85 instruktiven und leicht reproduzierbaren Versuchen der theoretische Teil des Buches wertvoll ergänzt wird.

H. Claus und H. J. Küster, Berlin-Dahlem

KAPLAN LANGMAN, Ida Mrs. A selected guide to the literature on the flowering plants of Mexico. - University of Pennsylvania Press, 3729 Spruce Str., Philadelphia, Pa.: 1016 pp. $25.-.

This large volume contains the most comprehensive available bibliography of the "flowering" plants (actually covers the seed plants or Spermatophyta) of the United States of Mexico from the 1500's up to the present time. The idea for the work came to the authoress as a result of her frustrated efforts at learning more about the Mexican flora from books and journals. In her searching out of books and journals to incorporate in her annotated listing, she visited 49 libraries in the USA alone as well as a much greater number in Mexico. The guide proper runs by the alphabetic sequence of authors' names, covering 793 double-columned pages (pp. 65-857), which is followed by the thorough indexing of all items by subject matter. This latter index covers 157 four-columned pages (pp. 859-1015) and is ordinarily the first part of the book consulted, unless one knows the name of the author of some particular work. All botanical gen. names are listed alphabetically under the fam. name. - The most complete coverage is in the field of plant taxonomy and chorology (geography), with a considerable amount on ethnobotany; the listing is also of course of interest to one in the field of the history of science and of botany. Data on the following more limited fields are also contributed by this volume: vernacular names in the indigenous languages of Mexico; biography; economic botany (as a broader field than ethnobotany, since including modern industrial and other uses); travel and descriptive works coming within the discipline of geography, wherever these make mention of the plants of the country. - Despite its great size, the compilation seems to be relatively free from error.

George M. Hocking, Auburn, Ala.

KEELER, C. R. Books on aquatic biology, freshwater and marine. - Facile Press, 2306 Mission Road, Tallahassee, Florida: iv + 223 pp.; 1964.

Approx. 2000 titles are listed here representing all phases of the field and arranged in a logical subject order: general works, general botany, aquatic botany, bacteriology, Fungi, Algae, etc. Only books now in print and in the English language are included. (Many English translations of Russian books are noted.) The items are arranged alphabetically under each of the 55 subject divisions. Included are cytology, histology, taxonomy, evolution, genetics, economic aspects, methods, etc. Author, publisher, date, pp., and price are given. Author index and alphabetic list of publisher at end of volume.

George M. Hocking, Auburn, Ala.

KERN, F. D. Dr. Carlos E. Chardon (1897-1965). - Mycologia 57: 839-844, 1 Abb.; 1965.

nea 33: 18-30; 1968.

A phytogeographic and ecological essay precedes a floristic list of 5 Sphagna and 99 Eubrya of Ouachita Parish, northeastern Louisiana.

H. Crum, Ann Arbor

KAPLAN-LANGMAN, Ida. A selected guide to the literature on the flowering plants of Mexico. - University of Pennsylvania Press, Philadelphia: 1016 pp.; 1966. P

This large volume, a reedition of the 1964 publication, contains the most comprehensive available bibliography on the flowering plants of the United States of Mexico from the 1500's up to the present time. The idea for the work came to the authoress as a result of her frustrated efforts at learning more about the Mexican flora from books and journals, with which problem she first made contact in 1940. The guide proper runs by the alphabetic sequence of authors' names, covering 793 double-columned pages (65-857) which is followed by the valuable key to the listing, viz., the thorough in-

(6) EXCERPTA BOTANICA
SECTIO A -- BAND 14 1969
pp 199-200

dexing of all items by subject matter. This latter index covers 157 pages (859-1015) and is of course ordinarily the first part of the book consulted, unless one knows the author's name.

All botanical generic names are listed alphabetically under the family name. The most complete coverage is in the fields of plant taxonomy and chorology, with a considerable amount on ethnobotany; the listing is also of course of interest to one in the field of the history of science and of botany. Data on the following more limited fields are also contributed by this volume: vernacular names of indigenous languages of Mexico, biography, economic botany (as a broader field than ethnobotany, since including modern industrial uses), travel and descriptive works coming within the discipline of geography, wherever these make mention of the plants of the country.

G. M. Hocking, Auburn, Ala.

Under section B-5
Chorologia - America

Dr. W. JUNK - PUBLISHERS
13. VAN STOLKWEG DEN HAAG, NEDERLAND

Published in Qualitas Plantarum et Materiae Vegetabiles, Vol. XIV, 3, pp. 279-280 (1967).

(Mrs.) IDA KAPLAN LANGMAN. A selected guide to the literature on the flowering plants of Mexico. – 1016 pp. 1964. – $ 25.00. – Univ. Pennsylvania Press, 3729 Spruce St., Philadelphia, Pennsylvania 19104.

This large volume contains the most comprehensive available bibliography of the "flowering" plants (actually covers the seed plants or *Spermatophyta*) of the United States of Mexico from the 1500's up to the present time. The idea for the work came to the authoress as a result of her frustrated efforts at learning more about the Mexican flora from books and journals, with which problem she first made contact in 1940—1. Many persons would have "cursed the darkness" but Mrs. LANGMAN has lighted not a candle but a bright searchlight to effectively guide botanists to the rich literature otherwise so difficult of access. In her searching out of books and journals to incorporate in her annotated listing, she visited 49 libraries in the USA alone as well as a much greater number in Mexico. The guide proper runs by the alphabetic sequence of authors' names, covering 793 double-columned pages (pp. 65—857) which is followed by the valuable key to the listing, viz., the thorough indexing of all items by subject matter. This latter index covers 157 4-columned pages (pp. 859—1015) and is of course ordinarily the first part of the book consulted, unless one knows the author's name. The index has been rendered less bulky by some devices of condensation. Thus, all botanical generic names are listed alphabetically under the family

name. – The most complete coverage is in the fields of plant taxonomy and chorology (geography), with a considerable amount on ethnobotany; the listing is also of course of interest to one in the field of the history of science and of botany. Data on the following more limited fields are also contributed by this volume: vernacular names of indigenous languages of Mexico; biography; economic botany (as a broader field than ethnobotany, since including modern industrial uses); travel and descriptive works coming within the discipline of geography, wherever these make mention of the plants of the country. – Despite its great size, the compilation seems to be relatively free from error; a list of errata sent by the compiler and author (the latter since the bibliographic items are provided with commentary) shows mostly trivial printers' mistakes. – It must be obvious to anyone examining this literary guide of Mrs. LANGMAN that it must be considered an important standard reference book for every library in the field of science, let alone the more specialized libraries of botany, geography, history, medicine, pharmacy, etc.

GEORGE M. HOCKING, Auburn. Ala.

AUBURN UNIVERSITY

AUBURN ALABAMA

36830

SCHOOL OF PHARMACY

Telephone 826-4740—Area Code 205

22 Jl 1969

Mrs. Ida Kaplan Langman
Museum of Natural History
Room W 421
Smithsonian Institution
Washington DC 20560

Dear Mrs. Langman

The Moon Man holiday has given me the opportunity of catching up on some of my correspondence, etc.

Thank you for yours of 26 May and pardon me the slow response.

I cannot recall why I called your magnum opus a re-edition; I have checked my own copy and find no such thing. It may be that I got it from a review or listing of your book, but I can't recall where. It takes about a year to get these abstracts published, so I have forgotten long since writing the abstract.

I believe that I did send a copy of this abstract to the Univ. of Pennsylvania Press.

Re the listing, I am not responsible for it being put under the name Kaplan as Kaplan-Langman. It happens that the editor or her ~~husband or~~ brother, at least, have spent time in Peru or Chile. The name is Follmann and Follmann-Schrag (Frau Dozent I.A. Follmann-Schrag). She has taken the place of Frau Dr. Nolte, who died of cancer about 3 years ago. G. Follmann now prepares many abstracts for EBA. I believe he is a bryologist. Anyway, from their Spanish American experience, apparently she thought your background was Spanish and hence used your middle name. At least, that is what I presume.

If you know/ anyone who would wish to take part in abstracting, I would appreciate having them write to Frau F.S., Koenigin-Luise Str. 6-8, 1 Berling 33, Germany.

I note your association with IAPT, of which I am a member and have been for several years.

With best wishes, I am

Sincerely

George M. Hocking

George M. Hocking, Auburn AL

completed work, a proposed ten volume set, will represent Dr. Hutchinson's revision of the Bentham and Hooker *Genera Plantarum*. When completed, the set will provide keys to and descriptions of all known genera of flowering plants.

The sequence of families which precedes the generic catalog is a summary of Hutchinson's *Families of Flowering Plants*, second edition. All of the flowering plant families which are to be treated in the complete set are listed by orders in this summary section. The division Lignosae (primarily composed of woody taxa) has 54 orders, the first seven of which are included in this initial volume: Magnoliales, Annonales, Laurales, Dilleniales, Coriariales, Rosales, and Leguminales.

The generic catalog includes discussion of family and genus characters. The family treatment is generally broken down into notes about distribution, classification, anatomy, unusual characters, economic properties, and phylogeny and morphology. All of the families and genera are described and generic keys supplied when necessary. Two indices complete the book—one of economic properties, the other of scientific names.

There is no doubt that this set, as represented by volume one, will have a great impact on plant taxonomy—CHARLES R. GUNN, CROPS RESEARCH DIVISION, AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE, BELTSVILLE, MARYLAND.

*J. Hutchinson, 516 pp. Oxford at the Clarendon Press, 417 Fifth Avenue, New York, New York 10016. 1964. $20.20.

A SELECTED GUIDE TO THE LITERATURE ON THE FLOWERING PLANTS OF MEXICO*—This volume includes entries dating from the early sixteenth century to 1960. Publications with independent pagination and serial pagination are listed in this reference work.

The catalog is enhanced by a one hundred and fifty-six-paged cross index. Some of the major index entries include common names, family and genus names, authors, and subjects. A list of libraries used in preparing this work, a list of abbreviations, a list of bibliographic works consulted by the author, and a list of journal titles complete the book.

This fine reference work which has been carefully compiled by the author has many uses.—CHARLES R. GUNN, CROPS RESEARCH DIVISION, AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE, BELTSVILLE, MARYLAND.

*University of Pennsylvania Press, 3436 Walnut Street, Philadelphia, Pennsylvania 19104. 1,015 pages, $25.00.

Castanea 31(4): 318. Dec. 1966

Langmann, Ida Kaplan: A selected guide to the literature on the flowering plants of Mexico. — Philadelphia (Univ. Pennsylvania Press) 1964. 1015. S. 4°. Preis 25 $.

Der Verfasserin ist es gegangen wie vielen Botanikern, die in Mexiko Pflanzen sammelten und bei dem Versuch, sie zu bestimmen, durch das Fehlen einer zusammenfassenden Flora empfindlich behindert wurden. Sie hat daraus aber eine positive Folgerung gezogen und die notwendige Zusammenstellung der Literatur in Angriff genommen. In 24 Jahren hat sie dieses Werk vollendet, das allein schon durch seinen Umfang Achtung gebietet. Über das ursprüngliche Ziel hinaus sind außer systematischen und floristischen Arbeiten auch solche über Anatomie, Embryologie, Zytologie, Genetik, über Nutzpflanzen, einheimische Pflanzennamen, Forschungsreisen u. a. aufgenommen worden.

Das Werk ist in der praktischen Weise angelegt, die man oft an Arbeiten aus den USA bewundert. Über die technischen Entscheidungen, die die Verfasserin dabei treffen mußte, legt sie in der Einleitung Rechenschaft ab. Ihr leitender Gedanke war dabei immer die Benutzbarkeit für Botaniker. Einige zum Teil scherzhafte Bemerkungen anderer Bibliographen werden der historischen Einleitung vorangestellt.

Der sachliche Vorzug des Werkes besteht in den kurzen Angaben über den Inhalt der Arbeiten. Die Verfasserin hat mit Fachkenntnis alles Erreichbare selbst durchgesehen. Sie hat die Auswertung aber noch weiter getrieben: die Aufzählung, alphabetisch nach Autoren, ergänzt auf 156 Seiten Quart in Kleindruck ein bescheiden als Index bezeichnetes Sachregister, das botanische und einheimische Pflanzennamen, Orts- und Personennamen und sachliche Stichworte aus den verschiedenen Gebieten der Botanik enthält.

Ich glaube, daß kein Benutzer des Werkes Grund hat, einen Satz der Vorbemerkungen anzuwenden: "The specialist tends rather to criticize than to praise", sondern daß es allgemein mit Dankbarkeit aufgenommen werden wird.

F. Markgraf, Zürich.

Review in Botanische Jahrbuecher by F. Markgraf
84(3): 13-14 (Litt.) 1965 (Botanischer Garten, Zuerich 39)

The author, like many botanists who had the opportunity to collect plants in Mexico, on attempting to identify them, found herself seriously hindered by the lack of a comprehensive flora. But she drew a positive conclusion from this and set about preparing the necessary compilation of the literature. In 24 years, she completed the work and for this alone, its scope (or coverage), it commands attention. Beyond the original goal of covering systematic and floristic works, also included were works on anatomy, embryology, cytology, genetics, useful plants, native plant names, exploration and travel, etc.

The work is arranged in the practical manner for which works from the U. S. A. are often admired. On the technical decisions which the author must make, an explanation is given in the introduction. Her guiding thought was always the usefulness for the botanist. Some partly facetious remarks of other bibliographers precede the historical introduction.

The objective advantage of the work rests on the short statements about the contents of the works (cited). The author has, with technical knowledge, herself examined everything available. But she has made the usefulness even greater: an enumeration, alphabetically by authors, supplements, in 156 quarto pages of fine print, a subject index, modestly designated an index, which contains the botanical and native plant names, place and personal names, and subject cue words from the various fields of botany.

I believe that no user of the work will have any basis for using a sentence from the preliminary remarks: "The specialist tends rather to criticize than to praise," but rather it will be generally received with appreciation.

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Botanischer Garten — F. Markgraf, Zürich. 39

Bot. Jahrb. 84(3): 13-14 (Litt.) 1965

Archives #179

LANGMAN (Ida K.). **A selected Guide to the Literature on the Flowering Plants of Mexico**. Un vol. quarto, 1015 pp., *Univ. Pennsylvania Press*, 1964 (prix : 25 dol. U.S.). — Ce livre monumental viendra sans doute détromper quelque peu ceux qui pourraient supposer que « tout reste à faire » en matière de botanique mexicaine. Chronologiquement étendue de la conquête du Mexique par les Espagnols au début du XVI[e] siècle jusqu'à nos jours, cette bibliographie phanérogamique montre quel intérêt les plantes et la végétation mexicaines ont toujours suscité parmi les naturalistes européens et nord-américains. On ne saurait souligner assez combien est immense le service rendu à tous les chercheurs par Mme LANGMAN en mettant à leur disposition un tel ouvrage synthétique que l'on peut considérer, malgré le mot « *selected* » du titre, comme pratiquement complet si l'on excepte quelques références à des ouvrages anciens qui faisaient allusion à des plantes collectées au Mexique, des notes en langues germaniques, ou encore des indications concernant des végétaux mexicains cultivés en Europe.

On peut donc estimer que cette revue de la bibliographie phanérogamique mexicaine est exhaustive.

Précédée de quelques « pensées » sur la valeur des bibliographies, l'Introduction rappelle les travaux comparables antérieurs et situe les bases des présentes listes. Des précisions techniques extrêmement utiles sont données quant aux grandes bibliothèques du Mexique et des États-Unis qui fournirent des documents, ce qui permet de localiser ensuite ceux-ci grâce à des indications abrégées (p. 23-24). Une liste de 359 grands « ouvrages bibliographiques » consultés fait suite p. 25-32, ainsi que les mentions de plus de 2 000 titres de journaux et périodiques (p. 33-61). La Bibliographie proprement dite est représentée par ordre alphabétique des noms d'auteurs, avec mention des prénoms quand ils sont connus, puis de la date de chaque publication citée, avec références. Un court paragraphe indique l'essentiel de ce qui est traité dans chaque note ou ouvrage mentionnés. La façon dont fut conçue cette présentation est très astucieuse et pratique, car d'auteur à auteur, des renvois permettent de situer la documentation réunie ou la documentation recherchée lors d'une consultation d'ouvrage. A titre d'exemple, nous citerons le cas de botanistes français tels Nicolas MARCHANT, Louis-Claude DE CHASTILLON dont les publications firent connaître le fait que DODART (1676) avait contribué à l'étude de la flore du Mexique. Chacun de ces noms, parmi d'autres, est cité, le texte fondamental explicatif étant sous DODART. Dans d'autres cas, celui de Michel ADANSON, par exemple, Mme LANGMAN renvoie à des biographies spéciales sur ce botaniste. Nombre d'anciens Mémoires espagnols sont mentionnés, tels ceux de Gabriel Alonso DE HERRERA (1513), de Antonio de H. y TORDESILLAS (1601, 1615), etc. Naturellement, des travaux dus à Charles-Antoine LEMAIRE, à BRONGNIART, à DIGUET, parmi les botanistes français s'étant intéressé aux flores mexicaines, ont retenu l'attention, mais, au même titre, des notes de LOISELEUR-DESLONGCHAMPS, de DUHAMEL DE MONCEAU sont signalées.

Nous ne doutons pas que cette bibliographie soit ultérieurement, lorsqu'elle aura été compulsée et exploitée, à l'origine de découvertes utiles ; nous y avons personnellement puisé de riches enseignements sur des botanistes français qui nous étaient inconnus (par ex. Jacques GOHORY PARISIEN) ou sur des travaux sur la végétation mexicaine qui demeurent bien rarement mentionnés (B. F. DOBRYNINE, 1926).

Il n'est pas possible de passer en revue toutes les catégories de faits examinés. A la liste par auteurs s'ajoute (p. 820-856) une liste par dates des textes anonymes, puis quelques additions.

Au total, quelques 20 000 références attirent l'attention des lecteurs sur la botanique phanérogamique fondamentale (systématique, morphologie, phytogéographie, herbiers) ainsi que sur le « plantiore », les utilisations agronomiques, médicales, horticulturales des plantes mexicaines. On trouvera aussi les mentions de textes historiques, de notices biographiques de botanistes ayant travaillé les flores mexicaines.

Les pages 856-1015 sont occupées par un Index « à entrées multiples », mentionnant les noms de personnes, les noms botaniques scientifiques ou vernaculaires, les noms géographiques ou économiques, les catégories de problèmes (reforestation, relations géographiques, collecteurs, etc.), etc. Aussi trouvera-t-on une multitude de renvois de l'un à l'autre des quelques 25 000 petits chapitres de l'Index qui totalise plus de 65 000 indications.

Nul doute que cette bibliographie, telle qu'elle se présente, soit appelée à rendre les plus grands services ; il s'agit évidemment d'un document nullement critique, une accumulation de faits consignés dans la litterature, faits sur lesquels il conviendra de se pencher à nouveau. Cet ouvrage nous fait apparaître plus clairement ce qui justifierait de nouvelles études ou des travaux de synthèse : flore générale du pays, études phytogéographiques et phytocoenologiques des domaines forestiers, études de chorologie comparée. Un effort demeure sans doute à faire sur le plan de l'inventaire des collections botaniques mexicaines ; certains doutes ne sont pas levés définitivement sur celles de Joseph BROUARD comme sur celles de HOULLET, de GOUIN, de THIÉBAULT au sujet desquelles nous attirions précédemment l'attention. Cet ouvrage, dont le prix est très raisonnable, sera absolument indispensable dans toutes les bibliothèques scientifiques consultées par des naturalistes s'intéressant à la Flore, la végétation et l'Histoire des Sciences en Amérique centrale. — G. G. A.

This monumental book will, without doubt, disabuse somewhat those who would assume that "all still remains to be done" on the subject of Mexican botany. Chronologically covering the period from the conquest of Mexico by the Spaniards at the beginning of the 16th century up to the present, this phanerogamic bibliography shows what interest Mexican plants and vegetation have always aroused among European and North American naturalists. One can not emphasize enough how great is the service rendered to all researchers by Mrs. Langman in placing at their service a work so all inclusive that one can consider it, despite the word "selected" in the title, as practically com plete with the exception of some old works which refer to plants collected in Mexico, some notes in Germanic languages, or references about Mexican plants cultivated in Europe. One may, therefore, consider that this review of the Mexican phanerogamic bibliography is exhaustive.

Preceded by some "thoughts" on the value of bibliographies, the introduction recalls co parable earlier works and establishes the base of the present listing. Some extremely useful technical information is given as to the great libraries of Mexico and the United States which ~~fnxix~~ provided documentations; this permits one to locate them im ediately, thanks to t e abbreviations indicated (p. 23-24). A list of 359 large "bibliographic works" consulted follows on p. 25-32, along with listings of more than 2000 titles of journals and periodicals (p. 33-61). The bibliography proper is represented, in alphabetic order by authors' names, with mention of first names where known, then the date of each publication cited, with references. A short paragraph indicates what is essential in what is treated in each note or work mentioned. The manner in which this presentation was conceived is very astute and practical, because from author to author cross references make it possible to locate the documentation brought together or the documentation studied, while consulting the work. As an example, we cite the case of French botanists Nicholas Marchant, Louis Claude de Chastillon, whose publications reveal the fact that Dodart (1676) had contributed to the study of the flora of Mexico. Each of these names, among others, is cited, the fundamental explanatory text appearing under Dodart. In other cases, that of Michel Adanson, for example, Mme. Langman refers to special biographies on this botanist. A good many ancient Spanish memories are mentioned, such as those of Gabriel Alonso de Herrera (1513), of Antonio de H(errerias) y Tordesillas (1601, 1615) etc. Naturally, works by Charles Antoine Lemaire, by Brongniart, by Diguet (among the French botanists interested in the Mexican floras) engage the attention. But, at the same time, notes of Loiseleur Deslongchamps, of Duhamel, ~~xx~~ of Monceau are also pointed out.

We are sure that this bibliography will be, in the long run (when it will finally have been checked and worked with) the source of useful discoveries. We have personally extracted from it rich amounts of information on French botanists who were unknown to us (for example Jacques Gohory Parisien) , or on works on Mexican vegetation quite rarely mentioned (B. F. Dobrynine 1926). It is not possible to review all the categories of subjects ~~xxxixx~~ examined. To the list of auth rs is added (p. 820-856) a chronological list of an nymous texts, then some additions.

In all, some 20,000 references draw the attention of readers to fundamental phanerogamic botany (systematics, morphology, phytogeography, herbals) as well as to plant lore, agronomic, medical, hor icultural us s of Mexican plants. One will also find citations of historic texts, biographical notices of botanists who have worked on the Mexican flora. Pages 856-1015 are occupied by an index of multiple entries, giving the names of persons, scientific botanical names ~~xf~~ or common ones, geographic or economic terms, categories of problems (reforestation, geographic relations, collectors etc.) etc. One will also find a multitude of cross references from one to the other of some 25,000 small headings of the index which totals more than 65,000 references.

There is no doubt that this bibliography as it is ~~xx~~ presented, may be called upon to render the greatest services: we are dealing here with a socument not at all critical, an accumulation of facts recorded in the litera ure, facts over which it will be worth going back to again. This work makes clearer what will justify new studies or survey works: a general flora of the country, phytogeographic and phytocoenologic works in the forest domain, studies of com arative chorology. Without doubt, work must still be done to prepare an inventory of Mexican botanical collections; certain doubts have not definitely been removed on those of Joseph Brouard, as

well as those of Houllet, Gouin, Thiebault, to which subject we previously drew attention. This work, very reasonably priced, will be absolutely indispensable in all the scientific libraries consulted by naturalists interested in the flora, the vegetation and the history of the sciences in Central America.

A SELECTED GUIDE TO THE LITERATURE ON THE FLOWERING PLANTS OF MEXICO. (Mrs.) Ida Kaplan Langman (Univ. of Pennsylvania). 1016 pp. $ 25.—. University of Pennsylvania Press, 3729 Spruce Str., Philadelphia, Pa. (1964)

Quarterly Journal of Crude Drug Research 5(2): 1965

This large volume contains the most comprehensive available bibliography of the 'flowering' plants (actually covers the seed plants or *Spermatophyta)* of the United States of Mexico from the 1500's up to the present time. The idea for the work came to the authoress as a result of her frustrated efforts at learning more about the Mexican flora from books and journals, with which problem she first made contact in 1940-1. Many persons would have cursed the darkness, but Mrs. Langman has lighted not a candle but a bright searchlight to effectively guide botanists to the rich literature otherwise so difficult of access. In her searching out of books and journals to incorporate in her annotated listing, she visited 49 libraries in the USA alone as well as a much greater number in Mexico. The guide proper runs by the alphabetic sequence of authors' names, covering 793 double-columned pages (pp. 65-857), which is followed by the valuable key to the listing, viz., the thorough indexing of all items by subject matter. This latter index covers 157 four-columned pages (pp. 859-1015) and is of course ordinarily the first part of the book consulted, unless one knows about a certain work and the author's name. The index has been rendered less bulky by some devices of condensation. Thus, all botanical generic names are listed alphabetically under the family name. - The most complete coverage is in the field of plant taxonomy and chorology (geography), with a considerable amount on ethnobotany; the listing is also of course of interest to one in the field of the history of science and of botany. Data on the following more limited fields are also contributed by this volume: vernacular names in the indigenous languages of Mexico; biography; economic botany (as a broader field than ethnobotany, since including modern industrial and other uses); travel and descriptive works coming within the discipline of geography, wherever these make mention of the plants of the country - Despite its great size, the compilation seems to be relatively free from error; a list of errata sent by the compiler and author shows mostly trivial printers' mistakes. - The lady is more than simply a compiler - she is also an author since the bibliographic items are provided with her commentary. It is obvious to anyone examining this literature guide of Mrs. Langman that it must be considered an important standard reference book for every library in the field of science, let alone for the more specialized libraries of botany, geography, history, medicine, pharmacy, etc.

G. M. HOCKING

A SYLLABUS OF MEDICAL HISTORY. By Fred. B. Rogers, M. D. — XIV, 111 pp., 30 figs.; 1962. No price given. Paper bound. — Little, Brown and Company, Boston, Massachusetts.

In a foreword by Dr Lercy E. Burney (former Surgeon General, U.S. Public Health Service), it is pointed out that this small pocket-sized volume is intended as

UNIVERSITY of PENNSYLVANIA
PHILADELPHIA 4

The College

Division of Biology
BOTANICAL LABORATORY

December 17, 1962

Dear Mr. Hosking:

I don't know where you heard about my bibliography - A Selected Guide to the Literature of American Flowering Plants. But I'm glad to hear of your interest in bringing it to the attention of those to whom it might prove useful.

Completion of the material has just been completed and we hope to go to press early in 1963. When the book is available, I shall certainly keep you in mind. Sincerely

(Mrs.) Ida K. Langwood

SCHOOL OF PHARMACY

Desk of:
DR. GEORGE M. HOCKING

Dear Mrs Langenheim -

I shall send (& abstract) reviews of the following publications:

~~Quarterly~~ Journal of Crude Drug Research

Excerpta Botanica

Biological Abstracts -

and possibly

Pharmaceutical Abstracts

Thank you & Sincerely

G.M.H.

Biographic Sketch.

Ph.D.

DR. GEORGE M. HOCKING, IS A NATIVE OF ENGLAND. HE WAS GRANTED HIS B.S. DEGREE AT THE UNIVERSITY OF WASHINGTON AND HIS MASTER'S AND DOCTOR'S IN PHARMACOGNOSY FROM THE UNIVERSITY OF FLORIDA. DR. HOCKING IS A LIFE MEMBER OF THE A.PH.A., AND HOLDS MEMBERSHIP IN THE AMERICAN INSTITUTE FOR THE HISTORY OF PHARMACY, FÉDÉRATION INTERNATIONAL PHARMACEUTIQUE, AMERICAN SOCIETY OF PLANT TAXONOMISTS, INTERNATIONAL ASSOCIATION OF PLANT TAXONOMY, RHO CHI, SIGMA XI, Soc. Amer. Pharmacosy., PHI DELTA CHI. HE HAS ALSO COLLABORATED ON COLLIER'S ENCYCLOPEDIA, COMMISSÃO DE ESTUDOS DE PLANTAS, BRASILEIRAS, MEDICINAIS E TOXICAS, AND ACTA PHYTOTHERAPEUTICA. HE WAS A MEMBER OF THE NATIONAL FORmulary revision committee for 13 years. HIS "DICTIONARY ON PHARMACOGNOSY AND ECONOMIC BOTANY" PUBLISHED IN 1955 IS AN AUTHORITATIVE BOOK IN THAT FIELD. YOU WILL MEET HIM IN YOUR PHARMACOGNOSY COURSES.

BBBBBBBBBBB

AUBURN UNIVERSITY

AUBURN ALABAMA

36830

SCHOOL OF PHARMACY

Telephone 887-6511—Area Code 205

5 Jan. 68

Mrs. Ida Langman
248 Harvey Street

Philadelphia, Pa. 19144

Dear Mrs. Langman

Thank you for the very fine greeting card, to the pacific thought of which I subscribe with all my heart. Will the stupidity of man never cease !

In my review in Qual. Pl., I refer to your listing of errors and mention that most of these are simply a case of lapsus calami and not really very serious. If you ever decide to publish or at least reproduce the list you have compiled (25 typed pp.), I would be pleased to have a copy to insert in my copy of the bibliography.

I have made a search of Excerpta Botanica A right up to the latest issue, but cannot find your name listed. Nor can I find it clipped in my P file (U Penn). It should certainly have been published and I will send in another notice, although my editor, a new one since Dr. Nolte died rather suddenly last year, is imposing a 2 year limit.

Enclosed is copy of a review, very similar to the one in QP, but this is in QJCDR.

The review should have been published in Pharm. Abstracts also, but I cannot find it there. I will put a notice in there also pronto.

It is hard to keep up with so much abstracting and indexing (I also abstract for CA and BA), but I do my best.

With kindest best wishes for 1968.

Sincerely

George M. Hocking

George M. Hocking, Auburn, Ala.

Arch. nr 6th 179

Please return
SKh

Book Reviews

A Selected Guide to the Literature on the Flowering Plants of Mexico. By Ida Kaplan Langman. A Morris Arboretum Monograph. University of Pennsylvania Press, Philadelphia. 1964. 1015 p. $25.00.

When a reviewer is confronted by a volume of this size, he is inevitably reminded that a few statistics may help him answer those all-important questions: Does the book have substance? Would I want it for my own library? Mrs. Langman does not say, as far as I can see, just how many titles are included in her bibliography, but the body of the text occupies almost 800 pages. Random counts indicate that there are usually about 25 references on a two-column page, so we arrive at once at a figure of about 20,000 articles listed in the entire work. It is stated in the introduction that compilation was begun in 1946 and the manuscript completed in 1962. This is a far cry from Nicolás León's *Biblioteca Botanico-Mexicana*, which has been up to the present the most generally useful and available bibliography in the field of Mexican botany. León's little book was completed in two and one-half months, and listed the works of 866 authors.

As another statistic it may be noted that on pages 33 - 61 are listed the journals cited or examined in the preparation of the *Guide*. Sample counts indicate that between 2250 and 2400 journals are listed. In the list are not only the expected botanical periodicals, and those more general ones devoted to natural history, but also a wide selection of suggestive and intriguing titles like *Parfums de France; Mercurio Volante* (Mexico, 1772 - 73); *Modern Philology* (Univ. of Chicago, 1903); *Vegetarian News* (London, 1921); and *Tribuna Israelita* (Mexico, 1944). Scanning these lists of titles, one suspects that the coverage of the *Guide* may be broad rather than narrow; this is indeed the case.

Not the least impressive part of the book is the index, which occupies pages 859 - 1015, and is set up in a four-column format. More of the index anon; it seems a good sign, however, that in a reference book of this kind the index occupies almost one-fifth as many pages as the body of the text, even though it is printed in small type and a condensed format.

It is clear that the book has its good and bad features. As the bad ones are so immediately obvious to the user, it may be well to mention them first. For such a large volume, the binding is poorly done; the cover on the review copy before me has already begun to tear loose from the body of the work. For such an expensive book it seems a pity to have to add the cost of a new binding before one can use the *Guide* for daily reference. Another drawback, from the user's standpoint, is the complexity of the index. Because of the many cross-references, subentries and sub-subentries, it would have been a great improvement if the editors could have managed to insert a guide word at the head of each of the four columns on each page, not merely at the head of the left-hand column. It is disconcerting, for example, in the SU-SY part of the alphabet, to find the entry "pre-Linnaean works" at the head of the third column. Looking back to the preceding column, one finds this is a part of the subentry "Mexico, plants of, in pre-Linnaean works," and this in turn goes back to "Systematic works, pre-Linnaean," which is in the proper place in the alphabetic sequence. The third-column heading "Systematic works — *continued*" would at once have resolved the difficulty for the user, made clear to him his place in the alphabet, and saved him the time of retracing his steps to the main entry before he could intelligently interpret the subordinate entries.

Individual words, especially names of genera, are hard to find quickly in the index. It is often quickest to turn the pages to an entry alphabetically later than the desired one, then turn back to find the latter. For example, to

Archives 1965

Reprinted from MADROÑO, Volume 18, Number 4, October 1965

REVIEWS

A Selected Guide to the Literature on the Flowering Plants of Mexico. By IDA KAPLAN LANGMAN. 1015 pp. University of Pennsylvania Press, Philadelphia, 1964. $25.00.

The publication of this annotated bibliography culminates more than 20 years of dedicated labor. The breadth of Mrs. Langman's research on the literature of Mexican botany is indicated to some extent by the journals and the bibliographic titles cited in the preliminary materials and by the list of libraries which she consulted. In order to obtain references to local material that might not have found its way to the larger libraries, Mrs. Langman visited libraries in 27 states of Mexico, so that here we have an invaluable tool for all having an interest in any aspect of Mexican botany from the time of the Conquistadores to the present. The viscissitudes of publishing evidently made impossible the last minute inclusions of references to the most important taxonomic contribution to our knowledge of the flora of northwestern Mexico, I. L. Wiggins, *Flora of the Sonoran Desert* (Stanford University Press, 1964).

Of the 1015 pages, 792 are devoted to an alphabetical compilation of author citations. The user should refer to Mrs. Langman's remarks (p. 12) regarding the difficulties encountered in citing authors' names, especially the Latin American "trinomials."

The 156 pages of Index (four columns to a page) immeasurably increase the value of the Bibliography, for the author's labor has forestalled ours. Familiarity with its organization will enable knowledgeable researchers to by-pass several of the reference steps. Otherwise, a step-by-step search for information about *jicama* would lead the reader from *jicama* to the genera *Cacara, Dolichos,* and *Pachyrrhizus,* each of which in turn refers him to "Leguminosae." Under this family the genera are listed in alphabetical order. Under the genera are various subject headings, and, finally, the desired author references to the main part of the Bibliography, q.v. A typographically understandable but unfortunate structural difficulty in the Index is the minimal indentation of the first subheadings. This, coupled with the fact that the main heading (when a subject is carried from column to column) is included only on the first of the four columns of each page, sometimes makes it difficult to find the desired entry in the Index. This problem is amply illustrated by perusal of the several pages of references to the Cactaceae.

Ida Langman, the institutions and grantors which supported her work, and the University of Pennsylvania Press deserve our thanks and congratulations for bringing this work to fruition. It is a "must" for all libraries having any interest in Mexico, as well as for all people concerned with any aspect of the plants of the area. Anyone using the volume should first turn to p. 9 and lighten his day by reading "Random Thoughts on Bibliographies."—ANNETTA CARTER, Department of Botany, University of California, Berkeley.

From the Buchbesprechungen of Zeitschrift fuer
Pflanzenphysiologie 53(3) Oct. 1965
by W. Rauh (Heidelberg)

Die vorliegende 857 seiten umfassende bibliographie vermittelt einem ueberblick ueber die literatur der mexicanischen bluetenpflanzen, beginnend von der entdeckung und eroberung Mexiko's durch die Spanier bis zu jetztzeit. Besondere aufmerksamkeit wird der taxonomischen, systematischen und pflanzengeogrnaphischen literatur gewidmet. Aber auch arbeiten aus anderen sachgebieten, wie geschichte der botanischen erforschung Mexikos, reiseberichte, nutzanwendung Mexicanischer pflanzen in der landwirtschaft, gartenbau, medizin, pharmakologie und industrie werden beruecksichtigt; weiterhin werden woerterbuecher der eingeborenen sprachen in denen einheimische pflanzen namen enthalten sind, zitiert. Der bibliographische teil werd durch ein 156 seiten langes ausfuehrliches sachregister ergaenzt, das ein auffunden der literatur erleichert.

Das werk wird all jenen botanischern ein wertvoller ratgeber sein, die sich mit der vegetation sowie den pflanzen Mexikos und de en nutzanwensung beschaeftigen.

Review of Langman Bibliography

Annals #179

(enlarged in ASB Bulletin 12(3): 63, 1965
(Association of Southeastern Biologists)

BOOK REVIEWS

Frontiers October 1965

A Selected Guide to the Literature on the Flowering Plants of Mexico

By Ida Kaplan Langman. University of Pennsylvania Press, Philadelphia, Pa. 1015 pages. $25.

A tremendous amount of work by a dedicated bibliographer has produced this massive, impressive, and valuable book at a most opportune time. As more and more botanists follow their research interests south of the Rio Grande across artificial political boundaries, they often soon encounter a boundary—no, a barrier—that slows further progress to a discouraging pace. This barrier is the "resources barrier," and it is automatically reached in taxonomic work when the search for an appropriate monograph, article, or other reference takes twice as long as does the identification once the reference is discovered.

With this excellent annotated bibliography, containing some 22,000 rather thoroughly cross-indexed references, the identification and classification of Mexican plants will be a much quicker and more enjoyable task. And through proper use of the various cross listings in the index, the *Guide* also functions as an interesting source of information on the history, agriculture, ethnobotany, drug plants, Indians, plant collectors, and botanists of Mexico. In the 28 pages of "Journal Titles Cited" are given the full title of each periodical *and* a valuable note as to where some of the more obscure of these publications may be found.

From an *Errata* sheet (kindly supplied by the author) and from my personal perusal of the book, it seems to be about 99% perfect. Although an occasional typographical error in a date (such as "1950" for "1960") may cause a temporary question in the mind of a research worker, other "errors" are only relative. Considering the problems of transliteration and of orthographic variants involved with many Aztec and Mexican common names, the change of "Citzotzel" to "ci-tzotzil" (on page 894, in the index) and the change from "Amarillo" to "Amarilla" (on page 864, in the index) are certainly of no consequence except to those who seek perfection, over utility, for perfection's sake alone.

More books such as this, that add significantly to our research resources on tropical botany, are sorely needed. Perhaps now that the way has been shown others may follow.

—C. Ritchie Bell
Department of Botany
University of North Carolina

Arabis massiliana

A SELECTED GUIDE TO THE LITERATURE ON THE FLOWERING PLANTS OF MEXICO. Ida Kaplan Langman. University of Pennsylvania Press, Philadelphia, 1964. 1015 pp. $25.00.

A tremendous amount of work by a dedicated bibliographer has produced this massive, impressive and valuable book at a most opportune time. As more and more botanists follow their research interests south of the Rio Grande across artificial political boundaries they often soon encounter a boundary — no, a barrier — that slows further progress to a discouraging pace. This barrier is the "resources barrier" and it is automatically reached in taxonomic work when the search for an appropriate monograph, article or other reference takes twice as long as does the identification once the reference is discovered. With this excellent annotated bibliography, containing some 22,000 rather thoroughly cross-indexed references, the identification and classification of Mexican plants will be a much quicker and more enjoyable task. And through proper use of the various cross listings in the index the "Guide" also functions as an interesting source book for information on the history, agriculture, ethnobotany, drug plants, Indians, plant collectors, and botanists of Mexico. In the 28 pages of "Journal Titles Cited" are given the full title of each periodical *and* a valuable note as to where some of the more obscure of these publications may be found.

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More books such as this, that add significantly to our research resources on tropical botany, are sorely needed. Perhaps now that the way has been shown others may follow. — C. RITCHIE BELL, Department of Botany, University of North Carolina.

With my hundred regards
Frans A. L.
10-5-65

MEXICAN BOTANICAL LITERATURE

LANGMAN, IDA KAPLAN — *A selected guide to the literature on the flowering plants of Mexico*. Philadelphia, University of Pennsylvania Press s.d., 3729 Spruce street, Philadelphia Pa. 19104. 1015 pages, published December 1964, quarto, cloth. Price US $ 25.-.

Now that Mrs Langman's book is before us, it is clear why there were "long periods when it looked as if this work might never obtain a publisher" (p. 9). The sheer size of the work is staggering. It is sufficient to say that in the course of its preparation Mrs Langman (in my estimate) consulted many thousands of books and pamphlets, as well as about 2300 journals or other serial publications, resulting in a "guide to the literature" which contains over 20.000 entries. When one is not primarily interested in Mexican botany, one may be amazed at first sight by this number. After all, this is a 'selected' guide to the literature on the flowering plants of Mexico only. Coverage is most complete in taxonomy and plant-geography, as well as in botanical books and articles published in Mexico itself. A great many items on horticulture, agriculture, forestry, medical uses of plants, folklore and linguistics are included. The most important aspect of this bibliography is, however, that it was prepared with the needs of scientific botany in mind. Mrs Langman did not include simply all publications coming from Mexico itself and those from outside Mexico showing the Mexican element in the title: she has also taken great care to include — especially for plant taxonomy — all those general works that have a bearing on Mexican botany. Monographs, revisions, articles or books on Mexican plants cultivated abroad, glossaries, vocabularies and indexes are all treated if there is a link with Mexican botany. For the great majority of entries a short abstract is provided outlining the main contents of the work and its relevance to botany in Mexico.

In her introduction the author very cleverly disarms all critics by referring to a detailed series of mottos presented as "Random thoughts on bibliographies". Among these thoughts there are some very intriguing ones. Most well-known is perhaps the reflection on the rôle of typographical errors which are said to have been made intentionally by Chinese printers in order to provide the discerning reader with a feeling of superiority. Very attractive also is Lawrence Clark Powell's dictum that "Every wise man knows that reference books are the best of all books for desert island reading, whether that island be San Juan Fernández or Manhattan". I found Powell's remark to be very appropriate for this bibliography. The desert island reading that I did on this book not only provided me with the great satisfaction of seeing what my friends had written on Mexican botany, but with its broad approach the book comes very near to giving a very representative picture of European and American botany. It is astonishing to see how many authors have in one way or another dealt with Mexican flowering plants.

In her notes to the entries Mrs Langman often refers to commentaries on the relevant publication, to reprints, abstracts and translations. The cross-indexing has been done with care, not only to the main entries themselves and to the commentaries and notes, but also to the various ways in which the sometimes rather intricate Latin American names can be listed.

The random thoughts on bibliographies do not allow me to make any remarks on typographical errors: nobody will expect that it is possible to escape from them in a work like this, and the author will perhaps not have made them intentionally after all. A slightly disturbing typographical practice is the decapitalization of German nouns.

Completeness cannot be achieved and is also excluded by the word "selected" in the title. It must be said, however, that within the field as outlined above, the completeness is remarkable. Apart from a certain incompleteness in the listing of various editions of pre-Linnaean works (which may after all be a question of policy), it is difficult to find obvious gaps. This is a great compliment to the thoroughness with which Mrs Langman has combed the literature. On the whole the coverage of the literature from Germany, Scandinavia and Holland is perhaps somewhat less thorough than the rest. This may be due also to language difficulties, for this is the area where the "Chinese" printer has been most active in providing food for the critic.

The index to the work is an achievement by itself. Suffice it to say that it consists of 70.000 lines and that consultation shows it to be very reliable and extremely useful.

One of the main results of the compilatory work done by Mrs Langman is that the study of the history of botany and of botanists in Mexico will be greatly facilitated by this

Acquisition #179

& 1201. 1949; Moldenke, Phytologia 3: 291. 1950; E. J. Salisb., Ind. Kew. Suppl. 11: 138. 1953; Moldenke, Résumé 133, 135, 136, & 461. 1959.

Herbaceous (?); branches very slender, straminous, subterete, striate, rather obscurely strigillose; nodes annulate; principal internodes elongate, 5—13 cm. long; leaves ternate or in 4's.

(2)

BOOK REVIEW

Alma L. Moldenke

"A Selected Guide to the Literature on the Flowering Plants of Mexico", by Ida Kaplan Langman, 1015 pp. University of Pennsylvania Press, Philadelphia, Pennsylvania. 1964. $25.00

Back in 1948, when my husband and I were visiting Mexico's Instituto de Biologia, we first met Mrs. Langman as she was industriously starting this useful bibliographic contribution to botanical literature. The idea for this work started its gestation in 1941 when Mrs. Langman first visited Mexico and turned to the libraries there for reference material about its plant life. She has been working diligently ever since in the leading libraries of Mexico and the United States, and so has been able to produce this magnificent compilation of the literature on Mexican flowering plants, their description, their taxonomy, their phytogeography, their economic importance, their mention in books of travel, their indigenous names in various local languages, and their role in the history of botany — surveying a tremendous field of printed and manuscript information over a long period of time.

We have pointed out a few errors to the author, and she has directed our attention to a few more. They seem virtually impossible to avoid in a work encompassing so many details from so many different sources. Since the publisher has offered to print a list of errata soon for distribution with the book there is no point in listing them here. I use the word "author" advisedly because this book is much more than a mere compilation; there are thousands of succinct, valuable comments on the inclusions.

Both reading and hunting in this work are easy because the print is clear and of a suitable size and format. The index alone covers 157 pages of four columns each.

So many present and future botanists and other researchers referring to this book will be ever so much in the author's debt because of all the sources made so readily available here, all the new vistas opened, and all the time subsequently saved.

The University of Pennsylvania Press is to be congratulated upon choosing to make this work available to readers, and the author for her persevering dedication.

May 1965.

Arch. me. 179

BIOLOGICAL ABSTRACTS
UNIVERSITY OF PENNSYLVANIA
3815 WALNUT STREET
PHILADELPHIA 4, PA., U. S. A.

Biological Abstracts is a medium for the publication of objective, non-critical abstracts, and is not a journal of criticism. Please frame your abstract accordingly.

For *textbooks, reference books* and other compilations, *popular and semi-popular works*, reviews, etc., the abstracts should be limited to a statement of the point of view and scope, and a brief characterization of contents; the abstract should briefly describe—not summarize—the work.

Books which contain *previously unpublished* results of research and observation, interpretation, theoretical deduction, etc., require a treatment similar to that accorded research articles, i.e., the abstract should be a brief, informative summary of the new contributions.

Since proof cannot be supplied, the abstract should be critically checked—especially as to scientific names of organisms, technical terms, formulae, etc.

To insure prompt publication, please mail your abstract within two weeks.

Please type your abstract double spaced.

LANGMAN, IDA KAPLAN./ A selected guide to the literature on the flowering plants of Mexico./ 1015 p. University of Pennsylvania Press. 1964. Pr. $25.--

This is a guide to literature dealing primarily with the identification, classification, and distribution of flowering plants (including gymnosperms) in Mexico. References have also been included for many related fields: the history of botany in Mexico (including biographical material of many who have made contributions to the subject); travel and descriptive works; vocabularies of indigenous Mexican languages which list plant names; and works on the economic importance of the plants - in agriculture, horticulture, ethnobotany, medicine, pharmacology, and industry. The period covered begins with the discovery, conquest, and exploration of Mexico and continues into the 1960's. Full coverage (almost impossible to achieve in any case) was the goal only through the early 1950's. Coverage after that is admittedly spotty. The work contains over 20,000 entries, a list of the libraries used in preparation of the guide, a list of the bibliographic works consulted, and a lengthy and detailed subject index. The bibliographic entries themselves are cited in alphabetical arrangement, according to the name of the author, and chronologically after that. -I. K. Langman.

Printed 46(8) No 32154 apr. 15 1965

(Please type or print your name at the end of the abstract)

Book Review

A Selected Guide to the Literature on the Flowering Plants of Mexico. Ida K. Langman. 1015 pp. Univ. of Pennsylvania Press. A Morris Arboretum Monograph. 1964. $25.00.

From time to time over the last several years mention has been made in these pages of a Bibliography of the Mexican Flora which was in preparation and which, when published, would appear as a Morris Arboretum Monograph. That day has now dawned and Mrs. Ida K. Langman's thousand page volume is at last in our hands. It is beautifully bound and printed with a highly evocative dust jacket, incredibly light for its thickness (nearly three inches), impressive in its coverage of a vast literature and extremely easy to use if one will take the trouble to follow the ground rules which the author has provided.

Stimulated by a visit to Mexico in 1940, Ida Langman became interested in the rich flora of that fascinating country and soon realized that there existed no adequate guide to its extensive botanical literature. Thus began a search which has consumed a quarter of a century, has entailed many trips to Mexico, has required visits to countless libraries, and has culminated in the present volume with its 20,000 entries, its list of journal titles and its highly useful subject index.

It may perhaps be expected that in a work so monumental certain errors and omissions will be detected. The author seems to have anticipated this, for in an introductory section entitled "Random Thoughts on Bibliographies" she has practically disarmed her critics by citing a number of comments by and about bibliographers. The words of the late W. L. Jepson merit quotation here: "It's to be sure," he wrote, "disconcerting enough to have such errors, but after all the main thing is, has the book got matter in it? Is it meaty? Not is it faultless. A faultless book is impossible."

Mrs. Langman's book is so replete with matter that one can only marvel at the prodigious industry and attention to detail which its preparation involved. Its coverage is broad and includes not only taxonomic and phytogeographic literature, but works in such related fields as the history of botany in Mexico, botanical exploration, and the economic uses of plants in agriculture, horticulture, medicine, pharmacology and industry. Also included are vocabularies of indigenous languages spoken in Mexico which contain references to plant names. The volume is thus one which should be not only in every botanical library in Mexico but in every institution which is concerned with the problems relating to plant-life in the temperate and tropical regions of the New World.

J. M. F., Jr.

Morris Arboretum Bulletin
16 (1) March 1965

former director of the National Physical Laboratory at Teddington, England; **Sydney Goldstein**, professor of mathematics, University of Manchester, England; and **Kaarlo Stahlberg**, professor in chemical engineering, Finlands Institute of Technology, Helsinki.

Robert B. Hunter, professor of materia medica, pharmacology, and therapeutics at the University of St. Andrews, Scotland, is visiting lecturer at Boston University School of Medicine during the current semester.

This year's Hitchcock Foundation lecturer at the University of California was **Heinz Hopf**, professor of higher mathematics at the Swiss Federal School of Technology, Zurich, and co-author with P. Alexandroff of *Topologie I*. The series of public lectures on the Berkeley campus began October 5.

Grants and Awards

The Republic of Syria has sent K. G. Wakim, of the Mayo Clinic, Rochester, Minn., the medal of highest order of merit in appreciation of his services to the medical school of the National University in Damascus. This is the second honor conferred upon Dr. Wakim in recognition of his recent services in the Near East. The first was decoration with the gold medal of the highest order of merit by the Republic of Lebanon in recognition of his contributions to medical education in the Near East and in the U. S.

The U. S. Atomic Energy Commission announced on October 1 that 148 new predoctoral fellows have been appointed under the AEC regional fellowship program for the 1950–51 academic year. Thirty-seven of the new fellows were appointed by Associated Universities, Inc., of New York, to study at institutions located in the Northeast; 10 were appointed by the Oak Ridge Institute of Nuclear Studies, to study at institutions in the Southeast; 71 were appointed by the Midwestern AEC Fellowship Board, Chicago, for study at institutions in the Midwest; and 30 were appointed by the Western AEC Fellowship Board, established by the University of California, for study at institutions located in the West.

The Committee on Award of The Society of the Sigma Xi and The Scientific Research Society of America has awarded the following grants-in-aid of research for 1950:

George Anastos, Miami University, publication of "The Ixodid Ticks of the Netherlands East Indies"; Stanley S. Ballard, Tufts College, study of the extension of thermal conductivity of optical crystals at low temperatures; Alexander S. Bartha, Juniata College, research on staining techniques as used in parasitology and serological diagnosis; James R. Beer, University of Minnesota, study of the requirements for successful hibernation in cave bats; Arthur M. Chickering, Albion College, studies of the spiders of Panama; Kenneth A. Christiansen, Harvard University, study of Collembola of the Nearctic; Demorest Davenport, Santa Barbara College, research on the physiology of commensalism; John J. Donohue, Rutgers University, study of littoral sediments along the coast of Maine; Tilly Edinger, Harvard University, study of the origin and evolution of frontal sinuses; Frank E. Egler, Aton Forest, Norfolk, Conn., research on regional vegetation; Walter R. Hibbard, Jr., Yale University, purchase of special apparatus for a study of wire and compression textures of body-centered cubic metals; Taylor Hinton, Amherst College, studies on the gene position effect in *Drosophila* raised under aseptic conditions; Malcolm Jollie, University of Idaho, study of the anatomy and phylogeny of Falconiformes; Irving A. Kaye, Brooklyn College, to continue a study of the preparation of α thienyl-β substituted amino-alcohols and derivatives as potential pharmaceuticals; Albert R. Mead, University of Arizona, field studies on the *Achatina* problem in the Pacific; Lorus and Margery Milne, University of New Hampshire, assistance in their investigation of invertebrate photoreception and photoreceptors; Cornelius Muller, University of Santa Barbara College, study of critical collections of American oaks in herbaria in Paris, Geneva, and Madrid; Margaret R. Murley, Wilson Junior College, publication of her study on "Seeds of the Cruciferae of Northeastern North America"; Raymond A. Paynter, Jr., Yale University, to continue a field study of avian-zoogeography of the Yucatan Peninsula; Sherman K. Reed, Bucknell University, work on the synthesis of fluorine substituted amines; Paul M. Ruoff, Syracuse University, study of the effect of plant hormones on specific enzyme systems; John W. Sease, Wesleyan University, purchase of an ultraviolet scanning device; J. R. Shah, India, purchase of apparatus for a study of magnetic lenses at the National Bureau of Standards; Royal E. Shanks, University of Tennessee, study of the seasonal course of tree growth; Lora M. Shields, New Mexico Highlands University, field study of leaf xeromorphy; Donn L. Smith, University of Colorado, pharmacological study of traumatic shock in the rat; Joseph Steigman, Polytechnic Institute of Brooklyn, study of the effect of high-intensity soft x-radiation on polymerization; Kathryn F. Stein, Mount Holyoke College, research on the possible influence of heredity in malocclusion; Calvin L. Stevens, Wayne University, purchase of a refractometer for approved research in chemistry; B. G. L. Swamy, Harvard University, publication of his investigation of the comparative morphology of the Santalacae; Richard E. Tashian, Purdue University, field study of the avifauna of southeastern Guatemala; and George C. Wheeler, University of North Dakota, morphological and taxonomic study of ant larvae.

The Chemistry Branch, Physical Sciences Division, Office of Naval Research, has announced the following new contracts during the 15 months ending September 30, 1950:

University of Alabama—R. B. Scott, Jr., mechanism of various organic reactions; University of Arkansas—E. S. Amis, the electrostatics of ion-dipolar molecule reaction rates; Bryn Mawr College—H. Kwart, physical chemical investigation of the Diels-Alder reaction; California Institute of Technology—L. Zechmeister, organic fluorescing substances in marine organisms; Emory University—O. R. Quayle, synthesis of cyclopropanone rings; George Washington University—J. Farago, oxidation of oximes; Howard University—L. M. Ferguson, studies of aromatic bromination with the aid of infrared spectroscopy; University of Illinois—H. S. Gutowsky, use of nuclear magnetic resonance absorption in structural and nuclear spin studies; University of Illinois—W. H. Rodebush and A. M. Buswell, fundamental properties of water and the liquid state; University of Kansas—E. Griswold and J. Kleinberg, stabilization of low-oxidation states; Michigan State College—M. T. Rogers, a magneto chemical investigation of adsorption; National Bureau of Standards—H. S. Isbell, infrared spectra of sugars; National Bureau of Standards—M. M. Davis, measurement of acidity and basicity in organic solvents; Northwestern University—F. G. Bordwell, reactions of alpha-halo sulfones; University of Oklahoma—S. H. Wender, identification studies on flavonoid pigments; Pennsylvania State College—P. J. Elving, new analytical methods for studying organic reactions; Pennsylvania State College

The Director of Biological Abstracts discusses the new facilities available and plans for the future

G. Miles Conrad

Director, Biological Abstracts, University of Pennsylvania, Philadelphia

Biological Abstracts Tools Up for the Future

By February of 1961 *Biological Abstracts* will have published one million abstracts during the thirty-four years since its establishment. So steep is the present rate of primary publication, however, that we can expect that *BA* will publish its second million within the next ten years. Unlike a primary research journal which, to a degree at least, can control and maintain its size by increasingly rigorous editorial selection and subject specialization, a comprehensive research information service such as *Biological Abstracts* must grow in direct proportion to the total volume of research publication. To make sure that the biological community would continue to have an adequate information service despite the explosive growth of primary publication, the Trustees of *Biological Abstracts* in 1956 adopted a plan which would double our coverage of the research literature in ten years and obtain the physical quarters necessary to achieve this goal. It is gratifying to report that in less than five years' time, with continued support of its volunteer abstracters, section editors and subscribers, *Biological Abstracts* has been able not only to double its abstract coverage but also to move into its own completely modernized and expanded quarters.

New building designed for efficiency

On October 6 and 7 a housewarming and symposium on "Biological Communications: Theory, Structure, Function, and Management" marked the formal occupancy of *BA*'s new central editorial office building. The remodelled building retains the same address—3815 Walnut Street, Philadelphia 4, Pennsylvania—but it is double the size of the original. At a cost of about $225,000 for land and buildings, the original building has been completely redesigned and remodelled to suit the special needs of *Biological Abstracts*' work flow. The building is centrally air-conditioned and is served by a new five-story elevator. On the first floor are located the Director's and Business Manager's offices, a Board Room which will double as a small auditorium and general conference room, a reference library, and the major portion of the Literature Acquisition Department. In addition to private offices for department heads and members of the editorial staff on the second, third and fourth floors, special offices or isolated areas are available for such diverse activities as composition, proofreading, page make-up, literature acquisition and recording, bookkeeping and accounting, circulation records, etc. In the completely remodelled basement are a small staff lunch room and kitchenette, a special Addressograph room, and a large area reserved for the installation of automatic data processing equipment.

87,000 abstracts in 1961

As *Biological Abstracts* moves into its new quarters, work is under way on its 1961 volume. This volume will contain some 87,000 abstracts and the work on it has been so planned that by December of 1961 our acquisition and editorial programs will be processing abstracts at the rate of 100,000 per annum. It is believed that a coverage of 100,000 articles per year, while some distance from "complete" coverage of the biological research literature, is an efficient optimum that will leave little of significance untouched. With this belief as a guiding principle, *BA* anticipates that its coverage will hover around 100,000 in 1962 and for several years thereafter.

189% increase in coverage since 1955

In 1955 *Biological Abstracts* published 30,058 abstracts. The publication of 87,000 in 1961 represents an increase of 189% in six years' time! Such an expansion in so short a time in the steel, automotive, or textile industries, for example, would not only be phenomena of widespread effect upon our economy, but would also present a multiplicity of problems to the management of the industries concerned. Whatever the effect of optimum coverage on the "economy" of biology, its effect upon the management of *Biological Abstracts* has been noticeable and immediate. For ex-

ample, the system of recording the receipt of primary journals and abstracts which was adequate for annual receipts of the order of 25,000 to 30,000 items was neither easy to apply to a much larger volume of items nor sensitive enough to keep us on the alert with reference to growing gaps in coverage. As a result, we have installed a modern recording system and equipment that will ensure a more sensitive control of a much larger number of serials and abstracts.

New translation unit in 1961

Although *Biological Abstracts* has always covered the great proportion of the foreign language literature, it must be admitted that a relatively greater proportion of its total coverage has been of articles in the English language. However, as we approach optimum coverage it becomes necessary to improve our coverage of writings in all languages—especially those languages with which so few of us are familiar. To ensure that this will be done, we are establishing a Bureau of Translations. The first concerns of this unit will be with the literature of the USSR and China. However, lest in our great concern with the biological research that is going on behind the "Iron" and "Bamboo" curtains we neglect to assess our coverage of research in other languages and nations, *BA* has been surveying its coverage of the literature coming from other areas of the world. For example, a detailed survey of the Spanish-Portuguese literature has just been completed. At present *BA* abstracts 487 journals in these languages. Our survey uncovered a total of 2942 different biologically related journals published in Spanish and Portuguese. However, after considerable study and search, it was determined that many of these had ceased publication or were of little value from the point-of-view of research reporting. The net result was the identification of 241 additional journals that should be added to the 487 Spanish-Portuguese journals *BA* is already covering.

Exchange with Chemical Abstracts

As the coverage of *Biological Abstracts* grows, it is inevitable that its coverage will impinge upon the coverage of abstracting journals that serve other sciences. To minimize wasteful duplication of effort in abstracting, but to ensure that the biological community can turn to *BA* with assurance that *all* of its interests are covered, we are extending our abstract exchange agreements with such services. For example, *Biological Abstracts* and *Chemical Abstracts* have just signed an agreement which will result in an interchange of 10,000 abstracts per annum. A similar agreement is being negotiated with *Meteorological Abstracts*.

BA's Increasing size frustrating

Up to now we have stressed the increasing size of *BA*. Because it is difficult enough for individuals to review the relatively few primary journals that are regularly available to them, some of them believe our service becomes less valuable as it increases in size. Such a perverse view must stem from the aphorism, "what you don't know won't hurt you." It *is* quite disquieting to realize that the relative handful of primary journals to which one is accustomed does not represent the sum of knowledge about a topic. However, numerous studies of reference citations have repeatedly shown that we are all linguistically and nationalistically biased in our use of the literature. Although this is understandable, it is hardly good scholarship.

Need for detailed, current subject approach

Good scholarship or not, *Biological Abstracts* is realistic enough to know that the sheer bulk of the record makes it a difficult physical and mental chore for an individual to find the small bits of information he needs from the huge morass of (to him) unimportant facts and knowledge that make up even one issue of *BA*. It is our realization of this difficulty, of course, that has led to the subject classified arrangement of abstracts rather than to an alphabetical arrangement by principal author. However, the very act of classification tends to isolate abstracts, for although the principal topic may fall in one category, subsidiary topics or information may relate to many other categories. To minimize this isolating effect of classification, *BA's* editors carefully cross-reference abstracts when necessary. Further, the interdisciplinary nature of newly developing interests in science makes it increasingly difficult to devise a scheme of classification that will satisfy all needs. As a possible solution to this problem, *BA* has for several years provided so-called "subject finder lists" for biochemistry and fisheries biology.

In a sense, however, all of these devices have been resorted to as a kind of interim subject indexing which can be provided concurrently with the published abstracts. Subject indexing, as classically pursued, is a slow and tedious activity. It does not suffice to pick out all the different words that one deems significant and arrange them alphabetically. It is also necessary to probe behind the words to see whether principles or processes, which are not named, are indeed the things which should be indexed rather than the words mentioned. Such probing requires much time and sophistication when one is dealing with technological information. Once the appropriate rubrics have been selected, only part of the classical indexing job has been done. It is now necessary to anticipate, if one can, the way in which some unknown user at some unknown future time will be apt to search for the subject at hand and to so construct the finished index that this unknown person can make effective use of the index. Carefully constructed indexes of this nature are difficult and time-consuming to produce, and it is unlikely that machines can help a great deal in their construction.

Realizing that the ever-expanding literature of biology will create even greater delays in index preparation, however, *BA* for a number of years has been searching for a way of bringing a current subject approach to its contents, pending the preparation of its more elegant regular Subject Indexes. We have sought not for automatic data processing devices, but rather for a system or method of subject indexing which is susceptible to machine handling and which at the same time is efficient economically and in the sub-

NEWS AND NOTES

THE INDEX NOMINUM GENERICORUM PROJECT was established at the 8th International Botanical Congress, Paris 1954, after passage of a resolution proposed by the taxonomic section. The lack of a complete index of validly published generic names had, until then, led to the publication of a great number of illegitimate later homonyms. This led to further burdening of the literature because of subsequent necessary name changes. Without an index, avoidance of such homonyms involved an enormous waste of time in searches through the appropriate literature.

Since 1954, the project to prepare an Index Genericorum has been based in Utrecht, Netherlands, and has been carried on under the auspices of the International Association for Plant Taxonomy. A grant has just been awarded to the Association, through its regional treasurer, Dr. Richard S. Cowan, by the National Science Foundation to support activities leading to the completion of the project within the next three or four years. Quarters are being made available to house the staff of botanical bibliographers in the Smithsonian Institution's Department of Botany, in Washington, D.C.

The bibliographic work is being directed by Mrs. Ida K. Langman, who is working in conjunction with Dr. J. Lanjouw, general editor, and Dr. F. A. Stafleu, technical editor, both of whom will remain in Utrecht. Mrs. Langman, who comes from Philadelphia, is the author of "A Selected Guide to the Literature on the Flowering Plants of Mexico," which was published by the University of Pennsylvania Press in December 1964. In August 1965, this work was selected to receive the Oberly Memorial Award, granted by the References Services Division of the American Library Association for the best bibliography submitted in the field of agriculture and the related sciences in 1963–1964.

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