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#### *About the Institute*

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

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

1961 NSF  
Application

Research Proposal  
Submitted  
to the  
National Science Foundation  
for

Further Botanical Exploration of the Hawaiian Islands  
and  
Continued Publication of Illustrated Descriptions in the  
"Flora Hawaiiensis"

from  
Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

1. Institution: The New York Botanical Garden, Bronx Park, N.Y. 58, N.Y.
2. Principal Investigator: Otto Degener
3. Title of Proposed Research: "Botanical Exploration of the Hawaiian Islands"
4. Desired Starting Date: The research is already under way; support is desired as soon as this proposal can be activated
5. Time Period for which Support is Requested: Five years
6. Budget Requested: \$61,920

1. Institution: New York Botanical Garden, Bronx Park, N.Y. 58, N.Y.
2. Principal Investigator: Otto Degener, Collaborator in Hawaiian Botany.
3. Title of Proposed Research: "Further Botanical Exploration of the Hawaiian Islands and Continued Publication of Illustrated Descriptions in the 'Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands'."
4. Desired Starting Date: The research is already under way; support for it would be gratefully received as soon as this proposal can become activated.
5. Time Period for which Support is Requested: Five years.
6. Description and Background of Proposed Research: Thanks to Grant Number G2216 dated January 1956 and its renewal as Grant Number G6377 dated May 1958, the writer and his wife conducted field work as well as study in herbarium and library. As a result of these efforts, the "Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands" has progressed through Book 5 far into Book 6. The total number of published pages in an edition of 3,000 copies available to the public comes to just over 2,000.

The Hawaiian Archipelago is so isolated geographically in the Pacific that of its estimated 20,000 different species, varieties and forms of Flowering Plants, all but a fraction of 1% are endemic. This high degree of endemism is not only limited to the Archipelago as a whole, but many taxa are limited to one isolated mountain summit, some arid ridge surrounded by a lush sea of vegetation, some darkly shaded gulch, or some isolated oasis in a barren waste of aa lava.

The continuous discovery and publication of novelties up to the present time indicate that our knowledge of the Hawaiian flora is still far from complete. Many such novelties are collected even in those areas that are rapidly being despoiled of all vegetation due to the ravages of feral goats, cattle, deer, swine, antelope and mouflon, the competition of weeds and of exotic trees planted by the State Government by 'plane and otherwise in the Forest Reserve, and the spread of agriculture. Such des-

struction of the native Hawaiian flora is continuing with ever-increasing fury, and cannot be stopped! Many species collected by early workers, and even by modern ones like myself, are already extinct and known to us only from herbarium specimens. Many more are on the verge of extinction and should be collected and studied before it is too late. We owe to future generations a representative set of herbarium specimens of our unique Hawaiian flora that we, due to commerce, ignorance and vandalism, are rapidly exterminating.

Though the collecting, describing and illustrating of the native flora is of prime importance, the introduced flora must not be neglected. Exotics should be collected as herbarium specimens and preserved as proof of their arrival in the Hawaiian Islands at a certain date. Comparison centuries hence of these pioneers and their descendants in the Islands may give clues as to the rapidity of speciation and other evolutionary problems as yet unformulated.

I acquired my interest in tropical plants in the summer of 1920 in Bermuda as undergraduate assistant of Plant Pathologist Herbert H. Whetzel. Two years later I enrolled as graduate student in the Department of Botany at the University of Hawaii, becoming a diligent collector of the Hawaiian flora. While trying to identify my finds with the available literature, using above all others the only general floristic work extant for the area, Millebrand's "Flora of the Hawaiian Islands" completed in 1871, I came to realize the incompleteness of man's knowledge of the Islands' rich flora. I resolved then and there to work toward helping correct this deficiency. With this in mind I returned home to New York City and continued the study of my Hawaiian plants under the guidance of Drs. Britton, Rydberg and Barnhart at the New York Botanical Garden. In 1925 I emigrated to the Islands permanently to collect as much of the fast-vanishing flora as possible and to help record it.



Due to limited library and herbarium facilities - truly wretched when I began almost two score years ago - I published relatively little entirely alone but distributed my collections for naming to leading specialists throughout the world. Almost every monograph dealing with Hawaiian vascular plants published since 1928 has at least cited my collections. Often I have been quoted, and not infrequently these publications contain descriptions of novelties published in collaboration with me. Consequently I have played a role as something more than merely the collector of rare plants.

As early as 1928 I had announced my intention to proceed with the publication of a *Flora Hawaiiensis*. From 1932 to the present this work has been appearing in loose-leaf fascicles until now the sixth volume is almost complete. Over 2,000 pages have appeared, and the work is profusely illustrated. This large work, while not resting exclusively upon my own collections, has only been possible through the experience I have gained and the specimens I have made as an observant field botanist.

Over 200 papers by about 88 authors, principally systematic botanists, have referred to plants collected or notes taken by me. Since my activities as a collector have been eminently successful, as indicated by the extent of the collaboration, I wish to continue them along about the same line. I am also anxious to continue the publication of the "Flora Hawaiiensis" as promptly as manuscript and illustrations can be prepared.

The procedure to be followed is to use a car for making as thorough a coverage as possible by road of the principal islands of the Archipelago within the next five years. Where the car cannot penetrate farther, I shall proceed on foot. Vast areas in the Islands are still botanically unexplored. Due to the extremely "chopped up" nature of the terrain in this volcanic region, much of it is extremely difficult of access. Also, the high degree of endemism in the Islands calls for as complete an exploration of them as possible. It is dangerous to botanize precipi-

tous areas and other types of rough lava alone so that often an assistant collector, besides my wife, should be available.

7. Facilities: Our home on the Island of Oahu is available as our laboratory and study. There we have our collection of books and pamphlets about Hawaiian and non-Hawaiian plants, our microscope and other study and writing equipment.

We have the use of a Volkswagen ambulance purchased second hand for \$1,500 February 1956 with NSF funds. This vehicle is in such a worn out condition after years of field work that any future major repair would be uneconomical. Consequently we believe it must be replaced within a year or two with a similar car possessing high clearance for rutted, mountain roads.

In addition, Mrs. Degener and I, through the kindness of its Director, have the use of the library and herbarium of the Bishop Museum in Honolulu. Here are preserved many of my plant finds, deposited from time to time as gifts.

8. Personnel: The permanent personnel involved would consist of myself and my wife. Being childless both of us intend, as in the past, to give essentially full time to this project. Funds are not requested from the National Science Foundation for salaries. In fact, local experience indicates that the purchase of needed plant drawings from artists at pre-arranged prices is more economical than having an artist on salary.

OTTO DEGENER  
(Principal Investigator)

Born: May 13, 1899, Orange, New Jersey.

Education: Trinity and Collegiate Schools, New York, N.Y.; B.S., Mass. Agric. Coll. (now Univ. Mass.), 1922; M.S., Univ. Hawaii, 1925; Sc. D. (hon.), Univ. Mass., 1952. Post graduate work at Woods Hole, Mass., N.Y. Botanical Garden and Columbia Univ.

Experience: Instructor in botany, Univ. Hawaii, 1925-27. Later Naturalist at Hawaii National Park. Botanist on Anne Archbold Expedition to Melanesia, 1940-41, spending 8 months in Fiji. As a result of botanical exploration the new Ranalian Family Degeneriaceae was named in his honor. Study in European herbaria, 1951-52. Botanical consultant for CAA for Canton Atoll, South Pacific. Collaborator in Hawaiian Botany, N.Y. Botanical Garden, 1935 - 61.

Books: Illustrated Guide to the More Common or Noteworthy Ferns and Flowering Plants of Hawaii National Park with Descriptions of Ancient Hawaiian Customs and an Introduction to the Geologic History of the Islands. 1-312 pp. 1930. Second edition, 1945.

Flora Hawiiana or New Illustrated Flora of the Hawaiian Islands. Books 1-5 (Book 6 in collaboration with Mrs. Degener over 75% completed.) Over 2,000 pp. 1932-61.

Naturalist's South Pacific Expedition: Fiji. 1-303 pp. 1949.

Dr. I. Hansen Degener  
(Research Associate)  
Actually co-author

Education: Student in the Natural Sciences, Albert-Ludwig University, Freiburg, Baden, 1944; Dr. rer. nat. (Dr. Nat. Sc.), magna cum laude, Friedrich-Wilhelm University, Berlin, 1949. Botanical assistant at the Botanisches Museum, Berlin-Dahlem, 1945-46; lecture and laboratory assistant to Drs. R. Pilger and H. Sleumer, Berlin-Dahlem, 1948-49; botanist, ditto, 1949-55; assistant in pharmacognosy at the Freie Universität, Berlin-Dahlem.

Publications: (as I. Hansen.) Europäische Arten der Gattung *Erica* L. Bot. Jahrb. 75:1-81. 1950. (With Gerloff, J.), Beiträge zur Kenntnis einiger Volvocales. Berl. Deutsch. Bot. Gesell. 65(4):87-93. 1952. (As I. Degener, with O. Degener), Nutzpflanzen der Eingeborenen von Fidschi. Mitt. Bot. Gart. u. Mus. Berl.-Dahl. 1:1-20. 1953. (I. Degener, with E. Potztl), Beiträge zur Anatomie und Systematik der Leptureae. Bot. Jahrb. 76:251-270. 1954. Coauthor or collaborator in most articles with her husband since her marriage in 1953.

Shorter Articles in Scientific Journals: To date my (since our marriage Dr. Isa Degener is mostly included) collections, my observations, my illustrations or descriptions of interesting finds or of novelties by myself and mostly collaborators are scattered under the accompanying APPENDIX. This is uncritical and incomplete as I lack access in the Islands to some references. It shows, however, that it has ever been my purpose to speed up our knowledge of the flora of the South Seas. As announced about twenty-five years ago in "An Opportunity to Cooperate in the Study of Hawaiian Plants" (*Torreyana* 33 : 158), my specimens always have been available for study to any qualified specialist anywhere. The following workers, for example, have taken advantage of my offer. Arnold has made use of a score of my cuts to illustrate his book about "Poisonous Plants of Hawaii," Sheriff has described many novelties in collaboration with me, Yuncker has described novelties in *Ouscuta* and *Peperomia* based on my collections, and Chandler now thanks me in the preface of his book for help. So far as Hawaii and Fiji are mainly concerned, my collections and observations have been of considerable value. I alone have influenced the work of most of the following writers mentioned in the APPENDIX favorably: Mrs. Degener and I, since our marriage.



9. <u>Budget Estimate</u> (5 years)	1961	1962	1963	1964	1965	TOTAL
a. Salaries of Drs. Degener -	-	-	-	-	-	-
b. <u>Permanent Equipment</u> \$5,000 (Purchase of car with high road clearance & 4-wheel drive for field work - time of purchase previous to next major repair need of present car)		-	-	-	-	\$3,000
c. <u>Expendable Equipment &amp; Supplies</u> (car upkeep, pressing equipment, preservatives, photostats, postage & shipping costs, etc.)	700	700	600	600	600	3,100
d. <u>Travel:</u>						
1. Drs. Degener & assistants with car from island to island by plane & boat	1,600	1,600	1,600	1,600	1,600	8,200
2. Car mileage: 5,000 miles @ 11 cents per mile <i>per year</i>	550	550	550	550	550	2,750
e. Maintenance in the field of 2 - 3 persons (meals & lodging)	1,650	1,650	1,650	1,650	1,650	8,250
f. Publication of "Flora Hawaiiensis"	3,000	3,000	3,000	3,000	3,000	15,000
g. 3,000 book covers, punching, trimming, collating, designing cover, making silk screen	5,000 (Book 6)	-	-	-	5,000 (Book 7)	10,000
h. Purchase of drawings made to order to illustrate specific species for <u>Flora Hawaiiensis</u> or <u>New Illustrated Flora of the Hawaiian Islands</u>	1,000	1,000	1,000	1,000	1,000	5,000
<b>TOTAL</b>	<b>15,800</b>	<b>7,700</b>	<b>7,700</b>	<b>7,700</b>	<b>12,700</b>	<b>51,600</b>
1. Indirect costs (20%)	3,160	1,540	1,540	1,540	2,540	10,320

**TOTAL BUDGET REQUEST FOR FIVE YEARS:** \$61,920  
 No person nor other agency than the National Science Foundation have been solicited for aid.

Principal Investigator & Applicant

# APPENDIX

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9. <u>Budget Estimate</u> (5 years)	1961	1962	1963	1964	1965	TOTAL
a. Salaries of Drs. Degener -	-	-	-	-	-	-
b. Permanent Equipment \$3,000 (Purchase of car with high road clearance & 4-wheel drive for field work - time of purchase previous to next major repair need of present car	-	-	-	-	-	\$3,000
c. Expendable Equipment & Supplies (car upkeep gas., oil; pressing equipment, preserva- tives, photostats, postage & shipping costs, etc.)	800	700	700	700	700	3,600
d. Travel: Drs. Degener & car from island to island, by boat - plane -	1,000	1,000	1,000	1,000	1,000	5,000
e. Maintenance in the field of 2 - 3 per- sons (meals & lodg- ing)	2,000	2,000	2,000	2,000	2,000	10,000
f. Publication of "Flora Hawaiiensis"	3,000	3,000	3,000	3,000	3,000	15,000
g. Three thousand book covers, punching, (Book 6) trimming, collat- ing, designing cover, making silk screen	5,000	-	-	-	5,000	10,000
h. Purchase of plant il- lustrations & other services	1,000	1,000	1,000	1,000	1,000	5,000
<b>TOTAL</b>	<b>15,800</b>	<b>7,700</b>	<b>7,700</b>	<b>7,700</b>	<b>12,700</b>	<b>51,600</b>
i. Indirect costs 15% 207	2,370	1,155	1,050	1,155	1,905	7,740
<b>TOTAL BUDGET REQUEST:</b> (5 years)						<b>\$58,340</b> 61,920

No person nor other agency than the National Science Foundation has been solicited for aid.

Principal Investigator & Applicant

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1943. New Fijian Peperomias. Occas. Pap. Bishop Mus. 17:315-220.

I am primarily a collector in regions where collecting is extremely important due to the rapidity with which the native flora is being exterminated; secondarily, a botanical writer.

The list above shows 1.) that my activities during the last thirty-six years, thanks to collaborators, have been eminently successful and 2.) the surprising number of genera in which novelties are being discovered to this day. I wish, therefore, to continue my activities pretty much along the same lines. Some librarians, who do not realize the great number of species still awaiting discovery in the Islands nor that our botanical "knowledge" is still in a state of flux, believe a firmly bound flora to be best. This is a fallacy as such a work would require the addition of yearly supplements, making the whole soon unwieldy to use. The only practicable method is to continue the Flora loose-leaf, realizing that it is of preliminary character. Years hence, when the discovery of novelties tapers off, only then should the Flora be printed in bound form, with the illustrations reduced by half. With aid of the photo-offset process, the cost should be bearable.

#### 6. FACILITIES:

Facilities presently available consist of my home on the Island of Oahu as laboratory and study, my collection of 500 books and pamphlets about Hawaiian and non-Hawaiian plants, a Volkswagen ambulance purchased for \$1,500 with NSF funds, microscope, crude dissecting scope, etc. In addition, Mrs. Degener and I, through the kindness of its Director, have the use of an office at the Bishop Museum in Honolulu, of the library and of the herbarium. In the latter are many of our plant finds, deposited there from time to time as gifts.

#### 7. PERSONNEL:

I. Otto Degener, was born in Orange, New Jersey, May 13, 1899, receiv-

ing my early education at Trinity and Collegiate Schools in New York City, and earning the bachelor of science degree in 1922 at Massachusetts Agricultural College (now the University of Mass.). I first came to Hawaii in 1922 as tourist and student of botany, earning my master of science degree in 1923 at the University of Hawaii. I did post-graduate work at Woods Hole, Mass., at the New York Botanical Garden and at Columbia University. I was graduate assistant at the University of Hawaii, later accepting the post of naturalist at Hawaii National Park. Shortly thereafter I published my "Plants of Hawaii National Park." This was a "byproduct" of early work on my "Flora Hawaiiensis," published later.

I was botanist on the Anne Archbold Expedition to Melanesia in 1940-41, conducting about eight months field work in Fiji. My collections were monographed largely by A.C. Smith who, with I.W. Bailey, named a monospecific Renalium family Degeneriaceae in my honor even though I was not the initial discoverer. The finding of Degeneria in good flower and fruit resulted in a group of publications by Smith, Swamy and others.

In 1952 I received the honorary degree of doctor of science from the University of Massachusetts, my alma mater.

I had corresponded for a number of years about Lepturus and other genera with a Dr. I. Hansen of the Botanisches Museum, Berlin-Dahlem, Germany. Finally arriving in Berlin to study Hillebrand's Hawaiian ferns I was surprised to find Dr. Hansen a lady.

Mrs. Degener (née Dr. I. Hansen) is the second person permanently interested in furthering the project for which I am requesting a grant-in-aid. Due to the Second World War her studies were at times interrupted. Nevertheless, in 1944 she attended Albert-Ludwig University, Freiburg, Baden, Germany, specializing in the Natural Sciences. In 1945-49 she studied at the Friedrich-Wilhelm University, Berlin, receiving her degree of Dr. rer. nat. (Dr. Nat. Sc.) magna cum laude. During 1945-46 she was also Botanical assistant at the Botanisches Museum, Berlin-Dahlem, and in 1948-49 lecture and laboratory assistant to Drs. R. Pilger and H. Sleumer. In 1949-53 she was botanist at the same institution, and from 1948-53 likewise assistant in Pharmacognosy at the Freie Universität (Free University), Berlin-Dahlem. Since marriage she has been actively engaged with me in collecting and describing the local flora, unfortunately interrupted by house-keeping drudgery a charwoman without technical training could do as well.

Mrs. Degener's publications are:

- Hansen, I. 1950. Europäische Arten der Gattung *Erica* L. Bot. Jahrb. 75: 1-81.  
 Hansen, I. & Gerloff, J. 1952. Beiträge zur Kenntnis einiger Volvocales. Ber. Deutsch. Bot. Gesell. 63(4):87-93.  
 Degener, I. & Degener, O. 1953. Nutzpflanzen der Eingeborenen von Fidischi. Mitt. Bot. Gart. u. Mus. Berlin-Dahlem 1:1-20.  
 Degener, I. & Potzta, E. 1954. Beiträge zur Anatomie u. Systematik der Leptureae. Bot. Jahrb. 76:251-270.  
 Degener, I. & Degener, O. 1956-58. Flora Hawaiiensis. Over 250 loose-leaf pages.

## B. BUDGET FOR THREE YEARS:

	First Year	Second Year	Third Year
<u>Salaries</u>			
a. Artist and/or guide 4 mos @ \$350	\$1,400	\$1,400	\$1,400
b. Assistant (Dr. I. Degener)*	200	200	200
<u>Travel</u>			
a. Field work with auto 4,000 mi. @ 7¢	280	280	280
b. Transportation of car from island to island, or hire of U-Drive car, whichever is less costly	500	500	500
c. Per diem in the field for two persons (outer islands) 65 days @ \$20	1,300	1,300	1,300
<u>Expendable Supplies</u>	200	200	200
<u>Publication</u>	4,000	4,000	4,000
	<u>\$7,880</u>	<u>\$7,880</u>	<u>\$7,880</u>
Total			\$23,640
Institutional overhead - 10%			<u>\$2,364</u>
Total amount requested			\$26,004

\*To enable Mrs. Degener to free herself for botanical work by using her yearly salary to hire a charwoman for 4 hours per week @ \$1.00 per hour.

I have acquired valuable experience by being a recipient of a three-year grant of \$12,000 from NSF. The sum was ample for completing the publication of Book 5 of the Flora Hawaiiensis, begun by me alone in 1946, for which Mrs. Degener and I are extremely grateful. The sum, however, was not sufficient for efficient or extensive field work. I have therefore revised my estimate of former years to the above to obviate past inability to do much botanizing on outside islands.

Principal Investigator & Applicant





# General Printing and Lithography

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Dr. Otto Degener  
P.O. Box 187  
Waialua, Hawaii

Jan. 5, 1961

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R. GORDON WASSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

January 9, 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Dr. Degener:

Thank you for your 1960 Annual Report dated January 3. I have read this with much interest and want to congratulate you on the work you have been able to do.

We enjoyed your visit at the Garden but it pained me that it happened to come at a time when Dorothy and I were much away. We always appreciate the clippings from various newspapers covering the many interesting kinds of work that you are doing in Hawaii.

We appreciated your card from Kauai but were amazed at your remark that you were unable to mail live material to the Garden. We have talked to the USDA people at Hoboken and Mr. Everett tells me that "ornamental plant material may be sent to the Garden from Hawaii without any permit as long as it is soil-free. As Hawaii is now part of the United States no permit of ours is needed." I think that if you will put sufficient pressure on the post office they will accept the material as long as it is soil-free. The real problem is at this end anyhow and so there should be no problem in the actual mailing of the material.

Sincerely yours,



William C. Steere  
Director

WCS/gd

Jan. 11, 1961.

Dear Dr. Steere:

It was nice getting your informational letter of Jan. 9 and the Hoboken reaction. But theory and practice differ. I gave up mailing living plants, even as seeds, to the Garden, many decades ago because of the difficulty involved. I have no trouble, however, mailing such material to Kew or Berlin as our USDA inspectors are not particularly interested in foreign governments. These can take care of themselves. Hence Iss & I may, in polyethylene bags, occasionally "air lift" some choice endemic lobelia, treefern, *Lysimachia* or *Hillebrandia* to some European bot. garden from our country post office, actually from our RFD mailbox. But even to Berlin I had a hopeless fight on my hands on the Island of Kauai last month trying to get live material of a "*Lysimachia*" that I want Dr. Eckardt with his better lab., facilities to prove is an endemic genus. Iss drove from 5,000 ft. elevation at Kokee down a winding road to the sea level post office just to discover that the package with the "*Lysimachia*" (collected with some loss of sweat) was to be refused mailing.

It is all very well to maintain that soil-free ornamentals can be mailed to N.Y., from Hawaii without permit. But to do so I would be forced to drive with my package 35 miles from our home in Waiialua to the plant inspector in Honolulu to have him inspect my specimen to determine that it IS soil-free. My own judgement is not accepted. Then we would have another 35 miles to drive home: 70 miles to get living material to the Garden that, after all, may not grow or may not be wanted.

I have been particularly frustrated with mosses because of the tedious, time-consuming task of getting them soil free preparatory to shipment. We simply lack the time as Iss & I are writing a Flora of Ferns & Higher Plants at the same time that we must press the wolf back from the door: We have 4 rental units for this and that means that I am general yard-boy and janitor and Iss is cleaning woman. Whenever a tenant vacates, so as to make a profit on the venture, we must do the painting and repairing ourselves as to pay professionals is hopeless. They get \$7.00 per hour! Nevertheless, we seem to be thriving physically in this "rat race."

The enclosed Hermann letter will show you how we tackle the moss situation. We carry polyeth. bags and whenever some fruiting Bryophyte hits us in the eye while we hunt Flora Haw., material, we grab it and bag it. When home from our field trip, I pour formalin into the catch, tie a couple of knots to seal the bag's opening, place bag with proper label in another bag, and then air- or surface-mail it to Europe or Japan as gift via my rural route village postmaster. I have absolutely no trouble, and the Europeans or Japanese are very appreciative and don't look such a gift horse through the peristomium. Should anything happen to be choice, it will eventually get into the literature.



I don't know whether my next mailing address will be Alcatraz or the Honolulu jail for mailing you the present pinch of Wilkesia "seed." Such letters I am supposed to bring to a special window at the Honolulu post office for inspection before mailing.

I prefer mailing excess duplicated herbarium specimens to foreign institutions as I can do so via my rural postmen who takes the parcel from my RFD mailbox and the following day bills me for it. Any package I send to the Mainland States means a trip to Honolulu to the inspector's office. Formerly these were then fumigated overnight and I had the nuisance of picking such packages up the following day. Now, luckily, they know my herbarium shipments are harmless, stamps them with the permit, and let me return home with them.

Although I appear to be complaining, actually I approve of these precautions as the endemic cotton seed harbors the pink bollweevil grub and our fruits are riddled with maggots of Med. & other fruit flies. To get such flies to Calif., would cause havoc.

To avoid being still more verbose and to save an air mail stamp, please pass on to Mr. Kolkebeck or Mr. Countey the two enclosed bills. They are self-explanatory.

Aloha,

The New York Botanical Garden BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
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WILLIAM C. STEERE, *Director*

January 18, 1961

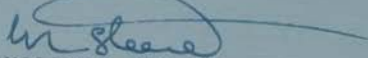
Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Dr. Degener:

Thank you for your letter of January 11 and its enclosures. I am more amazed than ever at your problems encountered in shipping materials and suggest that you get your uncooperative post office people to show you the actual regulations that they are enforcing upon you. There should be no problem at all with seeds, as we get seeds from all over the world from any source that we wish. Since shipments between institutions are much easier than between individuals I suggest that you arrange with some friend at the University of Hawaii or in the Bishop Museum to transship to us materials that you mail locally. I am sure that there must be someone who would extend this professional courtesy to you if you prepared the package for overseas shipment and reimbursed them for the cost. We get so much stuff here from all over the world--mosses, living plants, seeds, etc. etc.--that the problems you are having are very annoying to us. As you know, we very much want your material and it would much more naturally come here than to Japan or Germany.

With reference to Dr. Hörmann's question, I believe that the "Bryologist" would be glad to consider his article. The editor is Dr. Howard A. Crum, National Museum of Canada, Ottawa, Canada. I am returning the letter herewith.

Sincerely yours,

  
William C. Steere  
Director

WCS/gd

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

January 23, 1961

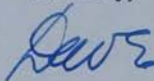
Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Otto:

Thank you for sending us another fascicle for Book VI of Flora Hawaiiensis. The pages have certainly accumulated. I am sure that you will enjoy a change from writing and will have much identification to complete.

I much admire the Silverswords on the cover of "Haleakala Guide." Thank you very much for sending us this publication.

Cordially,



David D. Keck  
Program Director for  
Systematic Biology



Wai'alua, Oahu, Hawaii.  
Jan. 27, 1961.

Dear Mr. Kolkebeck:

Here is another receipted bill for the car; still another is coming as the frame is in poor shape. We have not yet had time to shoo around for a good price. The body leaks when it rains, and the rear door cannot be locked. Because the car could be opened and all our equipment stolen when standing on the wharf overnight unattended waiting for shipment to the Island of Kauai last November, I 'phoned my insurance agent to insure the contents for \$300. The risk being too great, he declined. We may not continue to be that lucky in keeping our belongings.

The question we must decide is just when will the car become a bottomless pit in respect to repair bills and when will be the proper time to dispose of it altogether. That decision may come within the year.

Field work off poor roads is not conducive to a car's life and this one, you may remember, we bought second-hand for about \$1,500 five years ago.

We are not doing so much manuscript work presently as our time is mainly occupied with identifying our recent Kauai catch and writing the labels.

My wife joins in aloha,

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February 1, 1961

Dr. Otto Degener  
68-617 Crozier Drive  
Waialua, Oahu

Dear Dr. Degener:

Thank you very much for your letter of January 29. We appreciate greatly the valuable books which you sent to us. I have seen some of these books previously in the local libraries, and I highly value them. These books are to become the property of the Hawaiian Science Clubs Service of the University of Hawaii. The Hawaiian Science Clubs Service is a nonprofit organization formed under a National Science Foundation grant. Enclosed please find a sheet describing the nature of the Hawaiian Science Clubs Service and an ISSEC brochure.

We will definitely use your books at the camp. I am sure we will find them a precious asset.

Sincerely,



Donald Li  
Associate Director

DL:ha

Enclosures

P. S. The value of the books you sent us comes to \$25.84.



# THE HAWAIIAN SCIENCE CLUBS SERVICE

The Hawaiian Science Clubs Service was formed under a grant from the National Science Foundation in June, 1959, for the purpose of encouraging more and better quality science club activities in the state of Hawaii. We present to the young people of both city and rural areas instruction and demonstrations in science activities of a wide diversity. Science club activities are promoted by distributing ideas for science projects and demonstrations, science club guide books, interesting science fact books, free loan films, and literature concerning current events and announcements in science.

A weekly one-half hour television program called Science Clubs Hawaii is broadcasted over KHVH, which can reach over 80% of the island homes.

We have featured such interesting topics on Science Clubs Hawaii as "Meteorology in Hawaii," "Volcanology of Hawaii," "Mollusks in the Pacific," "Parasite Problems of Man and Animals in the Pacific," etc.

Weekly newsletters which aid in preparing students for the television programs are sent to the science club advisers and science teachers.

We also conduct workshops, aid in obtaining guest speakers, and arrange for field trips. We actively promote school science fairs, The Hawaiian State Fair, the National Science Fair and the Westinghouse Science Talent Search.

Description and Program for  
the Science Clubs Camp on  
April 28, 29, and 30.

Place: YWCA camp in Kaneohe, Oahu  
Time: 5:00 p.m., April 28 to 5:00 p.m., April 30.  
Organization in Charge: Hawaiian Science Clubs Service  
Person in Charge: Dr. Donald C. McGuire, Director  
Objectives of Camp:

1. To provide valuable learning experiences in science to supplement the students' regular school curricula.
2. To provide a meeting place where science club students from all over Oahu can become better acquainted with each other and to enhance their common interests.
3. To provide pleasant surroundings where students can combine fun with learning.
4. To provide excellent resource people in different scientific fields for science-career information.
5. To provide a meeting place for science club advisors, who can learn while renewing acquaintances with each other and with the students.

\* \* \* \* \*

The attached schedule is a tentative program. We will welcome any suggestions as to changes in organization, subject matter, or time devoted to your topic. Please inform us as soon as possible if we can help you prepare or obtain necessary equipment or visual aids.

*Teachers' Science Seminar Series*—A program of lectures aimed at keeping science teachers, and the public, up to date with current advance. This program, started in 1957-58 on Oahu, has been expanded to the neighbor islands. During the Annual Science Fair teaching methods workshops are conducted for the science teachers.

*Students' Science Seminar Series*—A highly selected group of high school juniors and seniors from various schools on Oahu meets weekly with scientists who aim to broaden their knowledge and stimulate their interest in science. This project is being extended to the other islands.



High school students demonstrating a science project for a Science Club Service T.V. program.

*Science Clubs Service*—A project to aid in the formation of, and maintenance of interest in, science clubs in the schools. The Service assists club advisors by providing lectures, field trips, film loans, science literature and science project advice. A weekly T.V. program is a regular part of this service.

*Elementary Science Texts*—A project antedating ISSEC which will be accelerated to provide science texts for grades 1-8. These texts are related to Hawaii's environment, flora and fauna. The first four volumes are now available. This project is co-operative with the Roman Catholic School System.

*Science Teacher Coordination*—A project to coordinate the various ISSEC activities with science teachers insuring that seminars, teaching aids and science fair material is available to them.

*Traveling Museums in Miniature*—In cooperation with the Bishop Museum, a project involving preparation of selected museum exhibits in a form that can be transported from school to school.



Preparing miniature museum exhibits for use in schools throughout the state.

*Counseling and Scholarships*—A program designed to aid counsellors and science teachers in advising qualified students as to suitable colleges or universities and as to scholarship opportunities.

### *Are You interested in ISSEC?*

ISSEC needs help. It needs people who can devote time to its projects. It needs money to buy equipment, books, films and services unobtainable on a volunteer or gratis basis. If you want to help, please call or write:

Mrs. H. Ivan Rainwater  
Chairman ISSEC

c/o Bishop Museum  
Honolulu 85-951

Mr. Charles E. Nolan  
Chairman, Community Participation Comm.

c/o Hawaiian Electric Company, Ltd.  
Honolulu, Hawaii  
54-971

INTER  
SOCIETY  
SCIENCE  
EDUCATION  
COUNCIL

WHAT

WHO

WHY

HOW



## NATIONAL SCIENCE FOUNDATION

## GRANT FISCAL REPORT

From

The New York Botanical Garden

(Institution)

Bronx Park, New York 24, N. Y.

(Address)

To

Grants Administrator  
NATIONAL SCIENCE FOUNDATION  
Washington 25, D. C.

Date FEB 3 1961

Report of obligations from NSF funds for grant number: 6077

(NSF No.)

Reporting period: July 1, 1960 to December 31, 1960

(Start)

(End)

Type report: Interim ☒ Number ☒ Final ☐ (check one)

Item

Amount

1. Salaries and wages	179.01
2. Equipment (excesses)	
3. Supplies, materials, and expendable equipment	122.45
4. Travel	175.28
5. Publication costs (Total - page costs, reprints, direct labor, etc.)	7,625.06
(a) Page costs only, if available	
(b) Reprints, direct labor, and any other publication costs	
6. Other (Specify): Postage	162.66
7. Total direct costs - Add lines 1 through 6	3,947.89
8. Allowance for indirect costs - 15% of line 7	592.18
9. Total obligations for above period - Add lines 7 & 8	4,540.07
10. Total obligations for prior periods	5,675.32
11. Total obligations to date - Add lines 9 & 10	9,755.39

COMMENTS: (Continue on reverse side if necessary)

SIGNED

TYPE NAME

Robert F. Kolkebeck

TITLE

Assistant Director

Two copies of an interim fiscal report are due approximately six months from award date of a grant and at six month intervals thereafter. Five outstanding commitments should be considered as obligations for the purposes of interim reports. Two copies of a final fiscal report are due as soon as possible after all costs chargeable to the grant are incurred. The following certification, in the case of final reports, should be inserted above, immediately preceding the signature of the official authorized to sign for the grantee institution: "I certify that this final fiscal report is correct, and that the expenditures included herein are deemed properly chargeable to the grant." (Unused funds are to be returned by check payable to the National Science Foundation.)

The New York Botanical Garden BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
FREDERICK S. MOSELEY, JR., *Vice President*  
MRS. HERMANN G. PLACE, *Vice President*  
R. GORDON WATSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

February 3, 1961

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener: NSF Grant No. G 6377

I am inclosing a report that has been sent to National Science Foundation on the above date.

We envy you enjoying the wonderful Hawaii weather -- We have had 38 inches of snow this winter so far and another 10 to 15 inches promised for the week end -- how would you like that?

Trusting this report meets with your approval and hope you and your lovely wife are enjoying the best of health.

Very truly yours,



*Report filed with Doc*

The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

February 3, 1961  
Air Mail

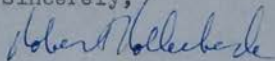
Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

Thank you for your letter of January 30 and the draft of a proposal for renewing your NSF grant. I think you have done a very good job and I shall get Dr. Steere's comments just as soon as he returns from California.

I shall get in touch with you again just as soon as Dr. Steere has had a chance to review the draft.

Sincerely,



Robert F. Kolkebeck

RFK:md



Feb. 9, 1961.

Dear Mr. Kolkebeck:

Many thanks for your recent letter about the new grant application, the cheque, and the Feb. 3 fiscal report. In the same mail with the three Garden letters, we received a letter and a postal of NSF interest.

OFF THE RECORD: I thought this time that asking for a five instead of three year grant is more practicable as it reduces our time in appealing for grants about half.

We are really always in a quandary regarding collecting on outside Islands. The prices are simply fantastic. We want to collect on relatively little-known Lanai Island but how can we spend \$20 per day for room & board as well as pay for 'plane flights and jeep? As we see it, Lanai is eliminated for the time being at least.

Now Molokai may be a horse of another color: I gave young Bryce Decker complimentary books - he can't afford almost \$25 for my own and others' writings. Now it appears Mrs. Decker is the daughter of a pineapple company employee on Molokai. The company has a club house for its workers and we have been invited by the Deckers to join them there for the Easter Vacation. We thus should get Molokai species at relatively little NSF expense.

Of course waiting with out collecting on outside islands for some happy windfall like this is not very efficient. We do hope we get another grant by which we will have sufficient cash without waiting for invitations - a guest is not so free to collect where he desires as an independent collector.

Well, anyway, we are overjoyed about the coming Molokai field work.

Our newspaper showed a photo of the Hudson frozen over. We expect to get a letter from the Montagnes any moment that they are on their way here.

Iss D., joins in aloha nui loa,

Lanai Inn (Mrs. E.C. Au) \$20.00 double room  
American plan per day  
Decker vacation March 25 - April 2

Shrubby, up to 3 meters tall. Leaves glabrous, crowded, ascending, opposite, on stiff crowded branches; new buds puberulent on midribs. Leaves ovate, glabrous, the tip acute or at least minutely retuse, the base obtuse or subcordate, with 3 - 6 (-8) by 2 - 4 (-5) <sup>cm.</sup> blades; petioles short, thickened, even somewhat bulbous, sometimes curved, 1 - 5 mm. long. Inflorescence a single flower or sometimes two or three flowers, on 2.5 - 3 cm. long pedicels, set with one or two pairs of small opposite subulate bracteoles; peduncle stouter, 3 - 5 mm. long, on the 2- or 3-flowered inflorescences set at the apex with a pair of subulate bracteoles 2.5 mm. long. Pistillate flower with sepals 1.5 - 2 mm. long; petals acute, 4 - 6 mm. long; shortened stamens 1 mm. long; ovary minutely puberulent; style slender, nearly 3 mm. long, with 4-lobed stigma. Staminate flower larger, with triangular 4 mm. long sepals; petals narrowly acute, 10 mm. long; fertile stamens of two sizes with four 10 mm. long ~~and~~ <sup>alternating with</sup> four 8 mm. long; style 4 mm. long, with 4-lobed stigma. Capsule 38 mm. wide, with 2-seeded lobes about 8 mm. wide, deeply parted but the 4 lobes joined at base and with each lobe dehiscing along upper suture and partly along lower suture.

Type Locality: "Maui: Meka, at an elevation of 5000 ft., - - -."

Local Range:

Extra Range: This member of the Section Megacarpae is not known elsewhere.



## BASIC COMBINATION

AUTOMOBILE

AL 6748  
(Ed. 5-58)

# NUCLEAR ENERGY LIABILITY EXCLUSION ENDORSEMENT (BROAD FORM)

It is agreed that the insurance afforded under any liability coverage of the policy or of any endorsement used therewith does not apply:

- (a) to injury, sickness, disease, death or destruction with respect to which an insured under the policy is also an insured under a contract of nuclear energy liability insurance issued by the Nuclear Energy Liability Insurance Association or the Mutual Atomic Energy Liability Underwriters and in effect at the time of the occurrence resulting in such injury, sickness, disease, death or destruction; provided, such contract of nuclear energy liability insurance shall be deemed to be in effect at the time of such occurrence notwithstanding such contract has terminated upon exhaustion of its limit of liability;
- (b) to the ownership, maintenance, operation or use of a nuclear facility by or on behalf of an insured, with respect to injury, sickness, disease, death or destruction resulting from the nuclear energy hazard; provided that except for byproduct material, this paragraph (b) shall not apply to goods or products manufactured or handled by a nuclear facility owned, maintained, operated or used by or on behalf of an insured while such goods or products are away from such facility after sale or distribution to others;
- (c) to the furnishing of services, materials, parts or equipment by an insured in connection with the planning, construction, maintenance, operation or use of any nuclear facility, (1) with respect to injury to or destruction of any nuclear facility or property thereat resulting from the nuclear energy hazard or (2) if the nuclear facility is located outside the United States of America, its territories or possessions, or Canada, with respect to injury, sickness, disease, death or destruction resulting from the nuclear energy hazard;
- (d) to the transportation, handling, use, sale, distribution or disposal of byproduct material, with respect to injury, sickness, disease, death or destruction resulting from the nuclear energy hazard.

As used in this endorsement:

1. The term "nuclear energy hazard" means the radioactive, toxic, explosive or other hazardous properties of source material, special nuclear material or byproduct material.
2. The terms "source material," "special nuclear material" and "byproduct material" shall have the meanings given them in the Atomic Energy Act of 1954 or by any law amendatory thereof; provided, except for byproduct material (a) contained in or combined with special nuclear material or (b) held, stored, transported or disposed of as waste by or on behalf of a nuclear facility, "byproduct material" shall not include any radioactive isotope away from a nuclear facility.
3. The term "nuclear facility" means:
  - (a) any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material;
  - (b) any equipment or device (i) designed or used for the separation of the isotopes of uranium or plutonium, (ii) designed or used for the processing, fabricating or alloying of special nuclear material or of irradiated materials containing special nuclear material, (iii) incorporating or making use of such irradiated materials, or (iv) designed or used for processing waste byproduct material;
  - (c) any structure, basin, excavation, premises or place prepared or used for the storage or disposal of waste source material or waste consisting of or containing special nuclear material or byproduct material;

and includes the site on which any of the foregoing is located, together with all operations conducted thereon and all premises used for such operations.

Subdivision (ii) of paragraph (b) foregoing is not applicable to the occasional mechanical processing or fabricating of special nuclear material by any person or organization at a location which contains no equipment, device or apparatus otherwise defined herein as a nuclear facility, where special nuclear or byproduct material is not regularly handled, stored, or disposed of as waste, and which is principally used for other operations not related to the handling, fabricating or use of special nuclear material.

4. With respect to injury to or destruction of property, the word "injury" or "destruction" includes all forms of radioactive contamination of property.

BIRCH INSURANCE AGENCY, LIMITED

*James Hays*  
PRESIDENT  
Authorized Representative

## NUCLEAR ENERGY EXCLUSION (COMBINATION)

It is agreed that the following exclusion is added to the policy:

This policy does not apply:

under coverages D, E, F, G, H, I and J to loss due to radioactive contamination.

ORIGINAL PRINTED  
IN THE UNITED STATES  
AND SUPPLY DIVISION

BIRCH INSURANCE AGENCY, LIMITED

*James Hays*  
Authorized Representative



# AUTOMOBILE COMBINATION POLICY



-AND-



## SPECIMEN POLICY

### DECLARATIONS

The insurance afforded is only with respect to such and so many of the following coverages as are indicated by specific premium charge or charges. The limit of the Company's liability against each such coverage shall be as stated herein, subject to all the terms of this policy having reference thereto.

#### Item 1. Name of Insured

OTTO DEGENER AND/OR THE NEW YORK BOTANICAL GARDEN

Address  
(No., street, town, county, state)

Botanical Garden - Waialua, Oahu, Hawaii

Occupation of the named Insured is  
(If married woman, state husband's occupation)

Botanist

#### Item 2. Unless otherwise stated herein: (a) the automobile will be principally garaged in the above town, county and state; (b) the purposes for which the automobile is to be used are "pleasure and business."

(b) Commercial

Policy Period: 08-66

From February 28, 1960

to February 28, 1961

12:01 A. M.

Standard time at the address of the named Insured as stated herein.

Item 4.	COVERAGES	CODE	LIMITS OF LIABILITY	LINE SYMBOL	PREMIUMS ELAC	EFIC
A.	Bodily Injury Liability		\$ 300,000.00 each person	X		
			\$ 500,000.00 each accident		\$ 14.48	
C.	Automobile Medical Payments		\$ 5,000.00 each person	X	\$ 10.00	
				X	Sub-Total	
B.	Property Damage Liability		\$ 10,000.00 each accident	XPDL	\$ 18.70	\$
E.	Collision or Upset		A C V*, less \$ Deductible	XPDS	\$	\$
D.	Comprehensive (Loss of or Damage to the Automobile, Except by Collision or Upset but including Fire, Theft and Windstorm)		\$	XF&T		\$
F.	Fire, Lightning and Transportation		\$	XF&T		\$
G.	Theft (Broad Form)		\$	XF&T		\$
H.	Combined Additional Coverage		\$	XF&T		\$
I.	Towing and Labor Costs	41	\$10. for each disablement	XF&T		\$
				XF&T	Sub-Total	43.18

\*A C V means Actual Cash Value

Description of the automobile and facts respecting its purchase by the named Insured:

TOTAL PREMIUM \$ 43.18

Year of Model	Trade Name	Model	Body Type; Trunk Size; Trunk Load Capacity; Tank Gallonage Capacity; or Bus Seating Capacity	Identification Number (I) Serial Number (S) Motor Number (M)	Number of Cylinders	F.O.B. List Price or Delivered Price at Factory	Rating Symbol	Actual Cost When Purchased Including Equipment	Purchased Month, Year	New or Used
1956	VOLKSWAGEN	PANEL TRUCK		20-072789			CL 6			

Any loss under Coverages D, E, F, G, H and I is payable as interest may appear to the named insured and

otherwise stated herein. The encumbrance, number and amount of each installment payment, due date and amount of final installment are:

The automobile is unencumbered unless

#### Item 5. Designation of insured for purposes of Division 2 of Coverage C, if required by Insuring Agreement III:

#### Item 6. Unless otherwise stated herein: (a) if no automobile is described above, the total number of private passenger automobiles owned on the effective date of this policy by the named insured and by his spouse, if a resident of the same household, does not exceed one; (b) except with respect to bailment lease, conditional sale, purchase agreement, mortgage or other encumbrance, the named insured is the sole owner of the automobile; (c) during the past three years no insurer has canceled insurance, issued to the named insured, similar to that afforded hereunder.

Hon., Hawaii March 4, 1960

BISHOP INSURANCE AGENCY, LTD.

*Jerry H. Bishop*  
Authorized Agent

### AUTOMOBILE COMBINATION POLICY

NO. XF 54838 13

Expires Feb. 28, 1961

Premium \$ 43.18

Insured OTTO DEGENER &/OR THE NEW YORK BOTANICAL GARDEN

E4302-6  
Printed in U. S. A.



-AND-



BISHOP INSURANCE AGENCY, LTD.  
1347 KAPOLANI BLVD.  
P. O. BOX 1010 TEL 98-2931

March 3, 1961.

Dr. David D. Keck,  
National Science Foundation,  
Washington, D.C.

Dear Dave:

We have a dandy *Tetraplasandra* with huge claret flowers collected during our last Kauai field trip. It is new. I am having it drawn. In a week or so we are returning to that Island of Kauai in hopes of getting fruit. We left a flower cluster on the tree. Also, we want to go to a patch of strange lobelias to see whether fls., have developed. Naturally we shall pick up other prizes besides. We think we can get a new shrubby *Chamaesyce*.

Poor Wimmer is dying of abdominal cancer.

Enclosed are four pages about the strawberry, published under NSF grant. I shall modify much of it and, with the zinc, turn it over to our local newspaper for popular consumption. This will give me the opportunity for a little blurb about insects being necessary to effect cross-pollination for the development of luscious "fruit." It is now the opportune time.

So many of our local legislators and politicians are such asses. One on Kauai has his "goal" the eradication of all insects on his island because of an ephemeral mosquito problem? The newspaper printed my wind-vs. insect-pollination explanation and I have had favorable comment about it by 'phone. But Isa & I just wonder if we should not give up such fights. We sweated blood some years ago against the introduction of deer, mouflon, antelope, etc., and finally lost the battle. All three herbivores have been scattered here anyway. It is all very discouraging.

We must get our *Frageria* sheets into the mails today - about 100 sets - hence our haste.

Aloha,

March 6, 1961.

Dear Dr. Steere & Mr. Kolkebeck:

Many thanks for your kind help on our NSF application. Isa & I, after some nasty grubbing about among our pamphlets, whipped the appendix into shape. We thought we had gotten it up-to-date and then, suddenly, the postman brought us more material that really should have been included such as Sister Roe's monograph of local Hibiscus spp. There she reproduces my drawing of H. breckenridgei. I lent it to her, even though Isa & I had not yet published it in our Flora Haw. We shall when we have cleared up some interesting questions Miss Roe does not tackle. There are 3 - 4 varieties and, apparently, some are nocturnal and others diurnal! We must wait for their flowering and not depend entirely on herb. material.

Five or six years ago my NSF application seemed in the balance of acceptance until we clinched it by mailing the Bibliographic Appendix as a follow-up to our original appeal. We are therefore very eager to have it mailed in the 20 desired copies to the NSF office in Washington at this time with the rest of pages.

We tried to get everything ship shape so you can turn over our copy to the photostat concern for duplication instead of having your office type everything over again.

You question, Dr. Steere, our high percentage of endemism. Endemism in Mosses (as Britton's monograph shows) and in Ferns is considerable, while in Flowering Plants it approaches 100%. It is not 100% complete due to a few more or less pantropic strand plants like Ipomoea pes-caprae and Vigna mearnsii. Other plants here previous to Capt Cook's Discovery, such as coconut, taro, breadfruit, banana, sugar cane, Morinda citrifolia, ginger, turmeric, candlenut, etc., etc., are in error by some workers added to the native species thus seemingly reducing the figure for endemism. Such plants are not native but of aboriginal introduction 2,000 - 1,000 yrs., ago. We have good proof through ancient epics of the Hawaiians and by Sells's pollen studies. In other words, our figure for endemism in our NSF application is correct.

Of course there is always a long delay between the time we collect our specimens in the field and the time we actually get them illustrated in print. What happens should I slip over a cliff or be hit by a taxi? Isa would be the sole survivor. Though she would be perfectly capable of completing the project without me, would not the grant suddenly expire with my expiration? This seems a weakness that might have been avoided by hav-





(Hale Degerer)

WAILUA, OAHU, HAWAII

The appendix, citing publications and submitted to U.S.G. two previous times, must be made up-to-date.

This will take some time and can follow later. It means looking through a nasty accumulation of pamphlets.

Aloha,

Otto Degerer

Mar 6, 1961

ing her Joint Principal Investigator rather than "Research Associate." Well, perhaps we can change this in 1966.

Thanks for the Insurance Papers. We mailed the cheque as instructed.

We feel so frustrated! The collecting trip on Molokai for the University Easter Vacation has been cancelled. Prof. Decker 'phoned that the pineapple company club house will be closed for months because of lack of water. The pipes leak all the way from the reservoir, and a man has been brought from the Mainland to Molokai to run some plastic through them for a fresh water tight lining.

We collected a grand and new Tetraplasandra with claret flowers on Kauai last November. We shall dash to that Island Saturday to try to get it in fruit - we left a flower bluster on the tree for that purpose. The Carl Gerdau of New York City are here now and this is our chance to economize by sharing a jeep etc. Mr. Montagne probably knows them. We will of course make other collections besides, esp. of lobelias. The T. is now being drawn.

All goes well excepting that the wiring in our car is wearing out. We are a bit scared of wandering too far afield from a Service Station. I hate the idea of getting stuck and being forced to walk 10 or more miles to get help. When we get a new car, because of Pres. Kennedy's warning about our gold reserve, I believe it should be of local manufacture and not a German Volkswagen even though it is extremely economical to run.

Aloha,

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

March 9, 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Otto:

Thank you for your letter of March 3 and for sending copies  
of the work on the Rosaceae. We are glad to add these to the  
FLORA HAWAIIENSIS, grant NSF-G6377.

I regret to hear of Wimmer's illness.

Best wishes for your collecting activities.

Cordially,



David D. Keck  
Program Director for  
Systematic Biology

TELEPHONE 99-2931  
1347 KAPIOLANI BLVD.  
P. O. BOX 3080  
HONOLULU 2, HAWAII

CABLE ADDRESS: "INSURANCE"

**BISHOP INSURANCE AGENCY, LTD.**  
GENERAL INSURANCE AGENTS

March 10, 1961

Dr. Otto Degener  
68-619 Crozier Drive  
Mokuleia, Waiialua, Hawaii

Dear Dr. Degener:

In reference to our telephone conversation with Mrs. Degener  
you are hereby notified that you will be covered while driving  
any car that you may rent on your coming trip to Kauai.

Very truly yours

*Charles Furuya*  
Charles Furuya  
Underwriter

cf



March 14, 1961  
Air Mail

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

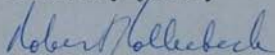
Dear Dr. Degener:

I know you will be glad to hear that your letter of March 6 and the NSF proposal arrived yesterday.

Dr. Steere is going to review the proposal and I shall write again after we have put it into final shape.

With best regards to you and your wife...

Sincerely yours,



Robert F. Kolkebeck  
Assistant Director

RFK:md

Waialua, Oahu, Hawaii.  
March 19, 1961.

Dear Dr. Steere & Mr. Kolkebeck:

You may remember that our anticipated University Easter Vacation field trip to Molokai is called off because the pineapple plantation clubhouse, where we intended to live as guests of a satisfied book customer, has a broken down water system. So, to amass more botanical loot, we enplaned for Kauai about a week ago where another customer, a Dr. Plucknett, to whom I mailed complimentary books with his order, helped us out. Thanks to him, we found two trees of the araliaceous Munroidendron, a genus I, botanizing here since 1922, had never seen before except for two scraps in the herbarium. Now we have good material for a drawing. It was nice that Ray Fosberg happened along for the kill. Dr. Plucknett also climbed with Isa and me to the newly discovered Hibiscus newhousei Roe, also an unknown to us and hitherto never illustrated.

All in all, we collected good material - including the unknown fruit of our new Tetraplasandra, discovered several months previously by us - in a short week in spite of considerable difficulty by not having our car along with the proper equipment. We could dry nothing in the field but bundled up our daily catches tightly, poured formalin into about eight different places, and sealed everything with freezer-size polyethylene bags. Skottsberg's Nikastroemias dropped many of their leaves and Sheriff's Bidens & Lipochaeta in part blackened, but no mold nor loss whatsoever occurred. We are still drying our catch over our Coleman lanterns now that we are home again.

Day before yesterday Dr. & Mrs. Eames of Cornell, whom we had not met before, drove out the 30 miles to our beach home to get acquainted. We invited them out to lunch as we were quite unprepared for visitors, having just come home the afternoon before. We had a most interesting day with them, he talking about anthers and she about fluoridation.

On the return home from Kauai we found your letter, Mr. Kolkebeck, awaiting us. Because the Kauai field trip was an unorthodox one, we are privately absorbing some of the expense. Enclosed are the receipted bills for your NSF folder.

The car, on advice of the Honolulu Foreign Car Clinic, who handled past major repairs,, and our village service station and repair man, is so far gone there is little purpose in overhauling it decently again. We wanted to take it to Kauai but at the last minute the wiring system gave out. We could have been marooned miles from help. We are now having it patched up so that we can get it to the Bishop Museum in Honolulu and back and eventually to Honolulu for a turn-in on a new car. As you will remember, we got it for \$1,500 second-hand almost six years ago. We are helpless without one high enough from the ground to manage rutted country roads for field work. The expense of getting a new car being a major one, we should like your "green light" to go ahead.

Aloha,

*(Handwritten signature)*

Collecting  
*Hibiscus kawaiianus*  
with Rocks  
at least 70 miles

3/20/61

$$\begin{array}{r} 70 \\ \times 11 \\ \hline 70 \\ 70 \\ \hline 770 \end{array}$$

Paumotuail  
April 29. 61

36 miles

11

---

36  
36  

---

396



The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

March 24, 1961  
Air Mail

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

Thank you for your letter of March 19 addressed to Dr. Steere and me.

I am sending your bills to Mr. Countey who will send you a check reimbursing you for them. In the future I would suggest that you send the bills directly to Mr. Countey - and I would also suggest that you prepare one piece of paper and attach receipted bills to it, rather than sending several little pieces of paper which may get lost in transit.

I can't give you a green light to go ahead with buying another vehicle - but neither can I give you a red light. If you still have sufficient funds under the present grant you may spend them as you think necessary to accomplish the work you are doing. I believe you requested funds for a vehicle in your new proposal, but as you point out, you need another vehicle immediately.

You might wish to refer to the booklet I sent you - National Science Foundation Grants for Scientific Research - on page 13 of which the following guide line is laid down:

"Adherence to Original Budget Estimates: The Foundation believes that the principal investigator, operating within the established policies of the grantee institution and the policies of the Foundation as expressed herein, is best qualified to determine the manner in which the grant funds may be used most effectively to accomplish the proposed research. Therefore, once the grant has been made, the grantee may use the funds for the proposed research without strict adherence to the original budget estimates. However, the Foundation should be kept informed of contemplated major deviations from the budget estimates and the reasons therefor."

I would see no objection to your writing directly to the National Science Foundation to explain why you feel you need a new vehicle now rather than later. Please send us a copy of your letter so that we will be kept informed.

We shall be interested in hearing from you again.

Sincerely yours,

*Robert F. Kolkebeck*  
Robert F. Kolkebeck  
Assistant Director

RFK:md  
Dictated but not read

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

April 3, 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Otto:

Your letter of March 28 opens the serious question of automobile transportation. I am not at all sure that you would be justified in using grant funds to purchase another car. I remember that you bought the ~~hearse~~ some years ago with grant money as a collecting car and did not realize until your present letter that this was a Volkswagen. This was given to you for field work, but as indicated by your reports to date the total amount of mileage on it for this purpose has not been very great. I think we are not justified in giving you a means of transportation to Honolulu and the Bishop Museum. That is your responsibility rather than ours. You should understand first of all that a car for field work is allowed only under exceptional circumstances, and the total we furnish in any one year could be counted on the fingers of one hand (probably with a couple of fingers amputated). I regret to take this stand because it is painfully clear from your letter that the present car needs One Horse Shay insurance.

Thank you for sending me the clipping about the silversword.

With best regards,

Sincerely,



David D. Keck  
Program Director for  
Systematic Biology

The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

April 4, 1961  
Air Mail

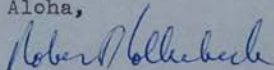
Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

Just a quick note to let you know that your letter of March 28 arrived but without the carbon of your letter to Dr. Keck.

The note to Dr. Maguire was enclosed and I passed it on to him immediately.

Aloha,



Robert F. Kolkebeck

RFK:md

April 7, 1961.

Dear Dave:

We have your April 3 letter and are glad to get clarified on the car situation.

We thought the best plan would be to struggle along with the present NSF car until the grant expires. With this in mind, we got the car to Honolulu to have the wiring overhauled. The foreign car experts worked on it all day. Then at closing time we got the surprising answer we should bring it back for further work next week. This is to be just for the wiring system - nothing else! We then fully realized that the car is now a bottomless pit into which more and more cash would sink out of sight unless we did something drastic. Even though the car belongs to NSF, we thought we could, without further permission, just dump it.

Late yesterday afternoon, with the car still in the repair shop, we walked to the Volkswagen concern in the neighborhood and dickered with their salesman and this morning continued the dickering by phone. Here is the result: We are paying the full amount of cash within one week and get a credit of \$100 for doing so; we get a further credit of \$400 for turning in the NSF car on the purchase price of a new one.

The delivery on the new car was made late this afternoon and the salesman hauled away the NSF ambulance - it was not a hearse as you had thought - back to Honolulu. What we cannot understand is how we can get \$400 credit for a car that we had bought from them second-hand to begin with five years ago! The struggle to sell cars must be terrifically keen.

We shall get in touch with Mr. Kolkebeck, acquainting him 1.) that the NSF car is no more, 2.) that we are adding \$500 to our NSF fund as credit for selling the car, and, 3.) that the new car is our own and that collecting expenses should be adjusted by mileage or some other way as he sees fit.

With this new turn of events, my application for the new grant mailed by me to Dr. Steere and probably even now in your files, should be modified to alter the car purchase item into mileage and other travel (such as shipping car between the different islands).

Temporarily grounded, we have been busy distributing the piles of specimens that have been accumulating and were almost crowding us out of our home. We are surprised to discover we ship gift parcels to 36 different institutions. Some of these, however, receive only certain genera like *Depauw*, *Peperomia*. From Wilbur of Duke University we learn that our plants will be safely housed in new NSF herb cases.



As it would cost about \$50 to reprint our *Flora Hawaiiensis Capparis sandwicensis* sheet that appeared 9/27/37, Isa and I thought it better just to get our new variety out of our system by printing it in *Phytologia*. The expense here is trivial, and we shall absorb it as our own private business and not as NSF. Who knows, later other varieties or forms may turn up and then we should revise our sheet for a later *Flora Haw.*, edition.

All in all, our project is going ahead satisfactorily. We have another form almost completed at the printers. During the past weeks a little more emphasis has been put on writing labels and clearing our shelves and store room. This work had to be done some time anyway, and with the tidal wave threat ever present there is no sense in postponing such work month after month.

Aloha,

The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

April 7, 1961  
Air Mail

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

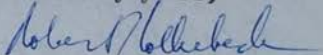
Enclosed is a mimeographed copy of your research proposal. I thought perhaps you would like to look it over before Dr. Steere submits it to the National Science Foundation.

We have a signature page signed by you so it will not be necessary for you to sign the enclosed copy; as a matter of fact we would like you to keep it for your files unless you find some serious mistakes in it and want to return individual pages to us with your corrections noted thereon. Will you please let me know how many additional copies you would like for your files - but not more than ten, please!

Please note particularly the changes in the budget totals on page 7. I'm afraid that your adding machine was not working properly, for there were several errors in the addition.

Please let us hear from you promptly so that Dr. Steere can send the proposal to NSF with a covering letter.

Sincerely yours,



Robert F. Kolkebeck  
Assistant Director

RFK:md

P.S. You sent us clippings from the Sunday Star-Bulletin of March 13, 1960. Did you want them submitted with the proposal? If you do I will check with Dr. Steere to let him decide whether it would be appropriate for him to send them to NSF.

Waialua, Oahu, Hawaii.  
April 8, 1961.

Dear Mr. Kolkebeck:

It was silly of me to forget to enclose the Keekian carbon copy. Here is mine. I don't need it back. Dr. Keek feels NSF should not pay for a new car, so we acted quickly as we were practically isolated out here in the country without any transportation - there are no buses.

Well, anyway, the NSF car is out of our lives as the most recent carbon to Dr. Keek explains.

Yesterday we paid \$1,200 cash of our own & NSF funds to the Volkswagen Company to get the \$100 discount and Monday we shall drive into town to the bank in Honolulu - the village one can't attend to this - to pay the remainder, a little more than half. The unexpended NSF monies will be back in our account at the Waialua Branch in the Bank of Hawaii that day.

Please 1.) credit the NSF account for \$500 which came to it in the purchase of the new car, 2.) Note that the NSF car is no more and that the new car is our own, and 3.) Note that we 'phoned the insurance company to transfer the insurance from the NSF car to the "Degener car."

With transportation matters radically changed, please advise us how we are to allocate car-collecting expenses to NSF. Should you allow us so and so many cents per mile - this we can easily figure by simply keeping a notebook in the car pocket - and then allow us the full charges for shipping the car from island to island when we go into the field?

Is it not phenomenal that we got \$400 for this car for which we paid \$1,500 second-hand five years ago? We don't understand how the company can make any profit.

Aloha to the Montagnes and yourself,

Dear Mr. Kolkebeck

Waialua, Oahu, Hawaii.  
April 8, 1961.



Waielua, Oahu, Hawaii.  
April 11, 1961.

Dear Mr. Kolkebeck:

Our letters crossed in the mails!

Regarding the NSF application (sent with your April 7 letter) due before May 15 in Washington, here are the following suggestions:

1. Page 5 under the paragraph Education, there is the misprint Dr. National Science for the correct "Dr. Natural Sciences."

2. Page 5 under Shorter Articles - - - , my wife's name is given as Dr. Ilsa for the correct "Dr. Isa."

3. Page 7 gets us into a quandary and we need your more expert advice. As Dr. Keck frowns on the NSF purchase of a car and Isa & I therefore purchased one ourselves, item (b.) needs revision. Don't you think, now that I am going onto 63 years of age, my leg power will gradually dwindle so that in 1964 and 65 it is more logical that I do more bot. writing and less mountain climbing? And, considering past tendencies, printing prices will rise rather than fall. With these two pretty good assumptions, I do think it wise to divide the \$3,000 request under item (f.) for the years 1964 and 65.

Your and Dr. Steere's decision will be more practicable than ours, so do please make the changes as you see fit and mail the application to Washington. Isa & I no longer need read the revision.

I believe from a psychological standpoint, the newspaper clippings would be wise to include with the application. The Washingtonians can discard them if need be.

Do let us know about NSF car allowance. Should it be at 11 cents a mile or what? That is the rate the local school teachers are allowed by the State.

Isa & I need one copy of the application for our files if our grant-in-aid is successful; otherwise we can discard our six-inch high bundle of NSF letters for good. I imagine this would be the last grant allowed me. Would NSF give one to a student older than 65?

Many at the Garden know the format of my *Flora Hawaiiensis* and the type of loose-leaf cover used. At your next staff meeting could you or Dr. Steere ask for advice regarding binderies to which I should submit bids for Book 6 covers? We are trying to conserve NSF funds to finance this last expenditure to put Book 6 "over the top."

It is raining cats & dogs, so I am writing the labels for a big series of *Santalum ellipticum* that Stauffer in Zurich wants to study. Leaf shape on different trees in the same colony are so variable that we hope Dr. S. won't fall into the pit of making seeds of varieties. Such errors are easy when one is unaware of what conditions exist in the field.



NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

April 11, 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Dr. Degener:

Dr. Keck will be away for several weeks so I wish to acknowledge your letter of April 7. I am sure he will be interested in what you have done toward the new Volkswagen.

We are very glad to have the four copies of PHYTOLOGIA containing the note on Capparis, grant NSF-G6377.

Sincerely,

*J Frances Allen*

J Frances Allen  
Associate Program Director (Acting)  
Systematic Biology Program

FOR: Mr. Countey  
Mr. Hanley

FROM: R. F. Kolkebeck

DATE: April 17, 1961

SUBJECT: Dr. Degener's NSF  
Grant #G6377, Our #326

According to Dr. Degener's letter of April 8, 1961, he has sold his Volkswagen which was purchased with NSF funds, receiving a credit of \$500.

Will you please indicate in your records a reduction in his expenses of \$500 and will you also please note that in effect this amount has been advanced to Dr. Degener to meet future expenses.

RFK:md

CC: Dr. Degener ✓  
Dr. Steere

April 19, 1961

Dr. David D. Keck  
Program Director for  
Systematic Biology  
National Science Foundation  
Washington 25, D. C.

Dear Dave:

On behalf of The New York Botanical Garden I am enclosing a research proposal for continued botanical exploration of the Hawaiian Islands by Dr. Otto Degener, the Garden's Collaborator in Hawaiian Botany. We sincerely hope the proposal will be received favorably by the National Science Foundation. As you know, Dr. Degener is presently carrying on his work under NSF grant G-6377.

You will notice in the budget, on page 7, that car mileage has been budgeted at 11¢ per mile. This is the rate local school teachers are allowed by the state and it reflects the higher transportation costs in the Islands.

Under separate cover we are sending nineteen additional copies of the proposal, along with reprints from an article by Dr. Degener that appeared in the Sunday Star-Bulletin (of Hawaii) dated March 13, 1960.

For your information, this proposal has not been submitted to any other agency.

Sincerely yours,

William C. Steere  
Director

WCS/gd

cc: Mr. Kolkebeck  
Dr. Degener ✓

The New York Botanical Garden BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
FREDERICK S. MOSELEY, JR., *Vice President*  
MRS. HERMANN G. PLACE, *Vice President*  
R. GORDON WASSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

April 19, 1961


Dr. Otto Degener  
Waialua  
Oahu, Hawaii

Dear Dr. Degener:

We are today transmitting the required twenty copies of your proposal to the National Science Foundation incorporating in them the corrections that you made. Naturally, we hope that this proposal is successful and that your support is continued in the manner that you wish. Although I am an optimist by nature, I know that the National Science Foundation is not too happy to carry on support of this sort more or less indefinitely. Consequently, I feel that it is wise to caution you that every time one of these proposals goes in, the chances become greater each year that funds may not be forthcoming. I tell you this not to shake your confidence either in the National Science Foundation or our sponsorship of your work, but just to introduce a note of caution that it would be unwise to commit funds before the grant is actually made, since overdrafts would be at your own expense. We will let you know just as soon as we can any information that we may get in advance. Since the deadline for submission of proposals is May 15 the Panel will meet about a month later, toward the end of June. Immediately after the Panel meeting I believe that we can get an unofficial, informal word from Dave Keck that will indicate what is going to happen, even though he cannot speak for the National Science Board.

I am glad to note your progress in field work and publication and we will look forward to the completion of Volume VI. We will look into the matter of binding but perhaps should have some information from you on specifications and your previous experience with sources and costs.

Sincerely yours,



William C. Steere  
Director

WCS/gd



The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

April 19, 1961  
Air Mail

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

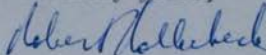
You will be glad to know that your research proposal has been submitted to the National Science Foundation by Dr. Steere. I am enclosing a copy of the proposal in its final form and of Dr. Steere's covering letter to NSF dated April 19, 1961.

I have informed the accounting department that you received a credit of \$500 for the Volkswagen purchased with NSF funds; a copy of my memo for the accounting department dated April 17, 1961 is enclosed.

In one of your recent letters you said that you had changed the insurance on the car. May I suggest that you inform Brown, Crosby & Co. Inc. (110 William Street, New York 38, N.Y.) about the change so that they can bring your liability policy up to date: Employers' Liability Assurance Corp. Ltd., policy #XF548383.

In your letter of April 11 you asked for advice on binderies from which you could get bids for the covers for book 6. I shall inquire of Dr. Rickett and others and pass on to you whatever information I can get.

Sincerely yours,



Robert F. Kolkebeck  
Assistant Director

RFK:md

Waielua, Oahu, Hawaii.  
April 22, 1961.

Brown, Crosby & Co.,  
110 William Street,  
New York 38, N.Y.

Dear Sirs:

In case the Bishop Insurance Agency, 1347 Kapiolani Blvd., Honolulu, Hawaii, has not informed you, please note that Policy No. XT550766 (dated 2/21/61) and covering the Volkswagen Panel Truck (1956), Motor No. 20,072789 terminated April 7, 1961 with our turning in the car for a new one. The latter does not belong to the New York Botanical Garden but jointly to Dr. Otto Degener & Dr. Ise Ingrid Degener. Its License No. is 6A1533 and Factory Serial or ID No. 687378.

Kindly note that this new car is now covered by insurance for which fees please check with the Bishop Insurance Agency of Honolulu.

Truly yours,

Waialua, Oahu, Hawaii.  
April 24, 1961.

Dear Harold:

Some day let me have this letter  
with your annotation that the  
bill has been paid. I & I keep  
all such facts in case the tax  
officials wish an accounting.

Our NSF grant is coming to an  
end, and we are applying for our  
third, last day thereof being May 15.  
If we fail in getting funds I fear  
we must in part "shut up shop"  
as taxes on our four rental units  
don't leave much cash around  
for bot. work. We must eat.

You three we assume are in the  
pink of condition with Spring  
beautifully awakening Nature  
about your Museum. We do hope  
Mrs. Mitchell came through the  
Winter without too much worry  
and expense. Aloha from I &  
& me to you all, Otto

We are worrying about the Oahu situation.

March 31, 1961

Dr. Otto Degener,  
Waialua, Oahu, Hawaii,  
DR

to

Harold N. Moldenke,  
15 Glenbrook Avenue,  
Yonkers 5, N. Y.

-----  
For portion of a page occupied in PHYTOLOGIA, Vol. 7, no. 7 . . . . . \$2.26  
postage . . . . . 1.01

\$3.27

Check received . . . \$5.00  
3.27

1.73

96 copies of the article as tear sheets at 3 cents each . . . . . \$2.88  
credit . 1.73

Amount still due . . . . . \$ 1.15

*Received Payment  
4/24/61  
Harold N. Moldenke*



NATIONAL SCIENCE FOUNDATION  
Washington 25, D. C.

POSTAGE AND FEES PAID  
NATIONAL SCIENCE FOUNDATION

OFFICIAL BUSINESS

Dr. Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

NATIONAL SCIENCE FOUNDATION  
WASHINGTON 25, D.C.

Dear Dr. Degener :

Date: 4/24/61

We are pleased to acknowledge receipt of your application for a grant in support of "Flora Hawaiiensis"

It has been assigned to the appropriate Program Director for study and evaluation, and he will communicate further with you. Would you please advise your institution's business office of the receipt of the application by the Foundation.

F.L. 9A-12

Biological & Medical Sciences

GPO 890007

April 24, 1961.

Dear Dr. Steere:

Thanks to your letter of April 17 with its wise advice we shall try to reserve cash for covers. Then, if anything goes wrong with future finances, we can put out Book 6, perhaps a bit slimmer than originally intended.

Due to past car trouble and the uncertainty of the future, we are holding back on most botanical work involving major expenses. So our time has been spent largely in identifying our past collections, writing labels and getting sets of duplicates mailed as gifts off to 38 - 40 interested institutions.

The price for Book 5 covers, as I remember, came to @ 72 cents. Whether making silk screen and plate was included in the price, I don't off hand know. The local concern making the Book 5 cover some years back is under new (inferior?) management and several letters inquiring about prices brought no reply. When I finally 'phoned, the answer was in such pidgin that I now lack faith in the concern. That is why I am so eager to get advice from Dr. Rickett and others at the Garden.

People are unconsciously swayed in their decisions. Isa & I, not seeing eye to eye with Dave on *Argyroxiphium*, *Dubautia*, *Reilleardia* & *Wilkesia* but publishing ideas similar to those of Sheriff, Carlquist and the old timers, will not help us any in winning a third NSF grant. Well, anyway, we feel grateful for the past two and won't tear our hair if we fail to get a third.

As Isa has a doctorate (cum laude at that), should we not work toward an NSF grant for her to push on with the Flora Haw.? She could be the main investigator. The project could be a modified one to include the Monocots only or Compositae, or some such subdivision. If my petition for a grant at NSF falls through, perhaps we should apply after July 1.

Several days ago I wrote Miss Branda Bishop of Pac. Sc. Congress if she would accept gratis \$1,000 worth of our books for free distribution to visiting botanists. If my NSF funds dry up, it may be wiser not to give away books but rather to try to sell them. As we depend on four rental units for our personal expenses, book sales would enable us to publish an occasional novelty as in pre-NSF days.

Thanks to J.F. Rock growing the plant in Kiuauu Valley, we three will print jointly *Hibiscus kiauianus*, a species apparently extinct in the wild state.

Enclosed is cover sample. Aloha nui,

UNIVERSITÄT ZÜRICH

Botanischer Garten  
und  
Botanisches Museum

Direktor  
Prof. Dr. H. U. Stauffer

Telephon 25 11 36 - Postfach VIII 15805

Dr. H.U. Stauffer

Zürich 25. 4. 1961

Dr. Otto Degener

68-617 Crozier Drive

W a i a l u a / Oahu

Hawaii / USA

Q u i t t u n g

für eine Tafel Exocarpos Menziesii Dollar \$ 10.--  
=====

erhalten zu haben bestätigt mit verbindlichstem Dank



Dr. H.U. Stauffer



Waiialua, Oahu, Hawaii.  
April 25, 1961.

Dear Mr. Kolkebeck:

As you suggested, I advised the New York insurance firm Brown, Crosby & Co., about the car situation and to contact the Honolulu Bishop Insurance Company for verification of the fact.

According to Isa's figures, the Garden has \$1,567.91 NSF cash remaining for us.

We are holding back with new major commitments until we are assured that NSF can give us a third grant. The major outstanding expenses are 1.) payment for Lobelia drawings the unfortunate, dying Dr. Wimmer is rushing his artist to complete for us.

2.) Ms., partially set up at the Advertiser Printing Co.

3. Collation of Book 6 and the making of the covers. This last will be a "major major" outlay and is a very decided puzzle. If we get another grant after May 15, 1961, Book 6 should be stuffed to contain 450 or so pages and the cover made to fit the resulting fat book. If, however, we fail to get another grant, Book 6 could contain a more modest number of pages and the cover made to fit the resulting slender book. Either book would be something for us and NSF to be proud of. With this uncertainty prevailing, I doubt we should order the making of covers until we get NSF's decision.

All goes well. We are spending some of our time personally binding Book 6 as it must be done eventually anyway and this does not entail any expenditures.

We just finished a description of a Hibiscus from the Island of Kauai we are naming for J.F. Rock. The drawing, except for seed, has already been made.

Aloha,

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D. C.

April 27, 1961

Dr. Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

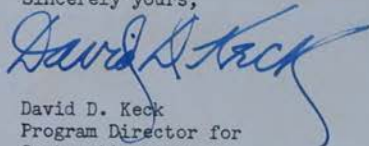
Dear Otto:

Your proposal has been assigned to the Program for Systematic Biology for consideration, so this now becomes the appropriate office for further correspondence concerning it. Should you have additional information to submit, or should you wish to learn of the progress of your proposal at any time, please do not hesitate to write me. It would be helpful if you would refer to it by its newly assigned number.

In connection with this proposal, we should like to know what support you are receiving from other organizations for any research projects. This information should include titles of the projects, and sources, amounts, and duration of financial support. We should also like to have information concerning any other applications you may have made and which are still pending.

As you are doubtless interested in the timetable scheduled for your proposal, I can tell you that it will be evaluated in June. If the decision on your proposal is favorable, and if funds with which to activate it are then available, it should be possible for you to obtain funds early in the autumn.

Sincerely yours,



David D. Keck  
Program Director for  
Systematic Biology

cc: Dr. Steere

B-10617 "Flora Hawaiiensis"

P.S. Applications for support of publications are now made to another office of the Foundation after at least part of the manuscript is at hand. Thus we cannot consider items of "publication" and "purchase of covers." This proposal will thus be considered as a request in the amount of \$33,730.

The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

May 2, 1961  
Air Mail

Dr. Otto Degener  
Waialua  
Oahu  
Hawaii

Dear Dr. Degener:

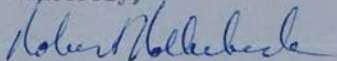
Seeing your letter of April 24 to Dr. Steere reminded me that I had not answered your inquiry about covers for book 6.

I asked Dr. Rickett for his advice but he had no suggestion other than for you to check with some of your friends on the West Coast. Probably you would want to obtain them from a supplier closer to Hawaii anyway.

I am sorry we do not have the information you are seeking.

With best regards,

Sincerely,



Robert F. Kolkebeck

RFK:md

May 3, 1961.

Dear David:

Many thanks for your informational letter of April 27.

Ira & I are receiving no support from any other organization for any research projects; nor have we solicited any help from any sources. We might add that as we are childless, we are not trying to build up a "fortune" but, as in the past, plan to use any available private funds or resources that we may have or acquire to further the knowledge and preservation of the Hawaiian Flora. With this in mind we offered April 18, and the Tenth Pacific Science Congress has accepted, a donation of \$1,000 worth of our books for free distribution to Congress members.

In answer to the second paragraph of Dr. Goodridge's letter (now enclosed), we suggested copies of our books be given to members registering for a botanical tour conducted by us in the mountains of Oahu August 27.

As we are not at all certain that application B-10617 for aid to continue the "Flora Hawaiana" will be granted by Washington, the donation of \$1,000 worth of books to an eleemosynary group like the Pac. Sc. Congress not only should please the participants but will allow us a tax exemption of \$200. This would be a modest yet useful sum to help our floristic work in the Islands.

As application for support of publications are now made to another office, could you inform us to whom to write for instructions? It is all very well and valuable to amass material by field work. But if this material is buried in museum cases and not described in a printed Flora easily used to educate local students and botanists here and elsewhere, we fear the funds expended would not have been put to their best use.

Sincerely,



May 5, 1961.

Dear Mr. Kolkeback:

You have a carbon of Dave Keck's April 27 letter in your files, and here is my answer to him. How do I & I apply for a grant to enable us to publish on our finds? People locally need a Flora, and the main need here is not for us to stuff museum cases with herb. specimens but to get the results of such stuffing before the interested public. Hence we crave your and Dr. Steere's advice.

Enclosed is a receipted bill for the drawing of a new species of *Tetralassandra*. S.H. Grove is the Chicago Nat. Hist. Museum artist. The price is fierce, but what can one do? The good material was in Chicago. I can't get any one cheaper unless an amateur and then the result may appear amateurish in print. Please pass it on to Mr. Countay and save us an air mail postage stamp.

Nothing esp. new here. We mailed a sample book cover to the Garden and are awaiting advice as to which firms to approach for bids.

Aloha,

NATIONAL SCIENCE FOUNDATION  
WASHINGTON 25, D.C.

May 9, 1961

Dr. Otto Degener  
Waialua, Oahu, Hawaii

Dear Otto:

Thank you for your letter of May 3 and the attached letter from Harold Coolidge. I am returning the latter for your own files, but I am glad to have seen it. You are making a very fine contribution to the 10th Pacific Science Congress with the donation of your books. Many visitors will be most grateful for your generosity.

I enclose a copy of instructions for submitting proposals for scientific publications. This is the information supplied by our Office of Science Information Service. When your proposal is ready for submission, it should be sent to that office.

I am expecting to do my touring of the Islands prior to the Congress. I hope to arrive a week early and visit Hawaii, Maui, and Kauai.

Sincerely yours,



David D. Keck  
Program Director for  
Systematic Biology

5/9/61

PACIFIC SCIENCE ASSOCIATION

TENTH PACIFIC SCIENCE CONGRESS

Executive Committee

LAURENCE H. SNYDER, Pres.  
HAROLD J. COOLIDGE, Sec. Gen.  
ROBERT W. HIATT  
G. P. MURDOCK  
C. E. PEMBERTON  
KNOWLES A. RYERSON  
ALEXANDER SPOEHR  
HARRY WEXLER

Cables  
PACSCIENCE  
Honolulu, Hawaii

To be held at the University of Hawaii, Honolulu, from 21 August to 6 September, 1961, sponsored by the National Academy of Sciences, Washington, D.C. and Bernice P. Bishop Museum, Honolulu, Hawaii, with the cooperation of the University of Hawaii.

Address all correspondence to:

SECRETARY-GENERAL,  
10TH PACIFIC SCIENCE CONGRESS  
Bishop Museum  
Honolulu 17, Hawaii

April 24, 1961

Dr. Otto Degener  
Waialua, Oahu, Hawaii

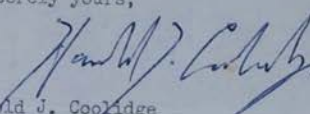
Dear Dr. Degener:

Miss Bishop has referred your letter of April 18, 1961 to me, and I want you to know how deeply the Congress appreciates the generous offer that you and your wife are making by donating 100 copies of your *Flora Hawaiiensis* Books 1 - 4 and 70 copies of your *Naturalist's South Pacific Expedition: Fiji* for distribution to interested participants in the Tenth Pacific Science Congress. If these volumes are turned over to the Bishop Museum for this purpose you will receive an appropriate receipt.

I should also like to have you go over the list of botanists who will be attending the Congress and designate those to whom you would like to have the copies of your publications presented. I am sure that the scientists that you select will realize how fortunate they are.

With personal regards,

Sincerely yours,

  
Harold J. Coolidge  
Secretary-General

The New York Botanical Garden BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
FREDERICK S. MOSELEY, JR., *Vice President*  
MRS. HERMANN G. PLACE, *Vice President*  
R. GORDON WASSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

May 15, 1961

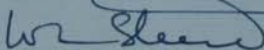
Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Dr. Degener:

In response to your letter of May 5 to Mr. Kolkebeck, I am answering one item about which you request advice. It would seem that you must now prepare a new proposal covering just the costs that Dave Keck points out in the footnote to you of April 27. In spite of the trouble involved, this can be a good thing as the amounts you are considering for publication are relatively small and could be well justified. This might be a good time to look into the total cost to see that you have made an adequate estimate of it.

If you will send a draft proposal which consists primarily of excerpts from the present one, plus a budget, we will be glad to look it over and to help you present a persuasive document to the National Science Foundation. As the Foundation gets bigger it is bound to develop more and more departments for handling different phases of scientific research.

Sincerely yours,



William C. Steere  
Director

WCS/gd

cc: Mr. Kolkebeck



Check 6/1/61

ESTIMATE  
FROM

## Able Metal Spinning &amp; Stamping Corp.

2009 NAMEOKE AVENUE

FAR ROCKAWAY 91, N. Y.

TO:

Mr. Otto Degener  
Waialae, Waike, Hawaii

Date:

May 2, 1961

Gentlemen: At your request, we are pleased to submit the following estimate:

Item No.	Part Number and Description	Quantity	Unit Price	Unit
	alum. corrugates 12"X18"X.010	50 to 100	75¢ ea	
	We still make them as before, but a little harder alum alloy & the corners are rounded		F.O.B. our plant	
	ordered			
	\$80 worth ±			
	June 1, 1961			

Delivery approximately ( *two weeks* )

Terms 1-10 N-30 F.O.B. Far Rockaway

Estimates for pieces are based on today's material and labor price. Our final price is subject to any adjustment between quoted material price and actual material cost.

This estimate does not include plating, dipping or any other finishing operation, unless specifically stated hereof.

Any claim of defective material must be made within 10 days after receipt of goods, and no returns for credit are to be made until our authorization has been given. No claims may be made with respect to parts upon which, without our written sanction any operations have been performed by the Buyer.

All pieces are bulk packed. If you request specific containers or specific quantities per container, an extra charge will be made.

Very truly yours,

ABLE METAL SPINNING &amp; STAMPING CORP.

Per

*W. J. Johnson*

Waiialua, Oahu, Hawaii.  
June 1, 1961.

Dear Dr. Steere:

Though I received your May 15 letter regarding NSF, I was unable to prepare the application properly until today. I had to meet a June 1 deadline on my Pac. Science Congress project, and that was quite time-consuming. It is certainly a relief to get both tasks out of the way so Isa & I can settle down into our Flora Haw., routine. The printer has another form just about ready for the press.

Though it must have been a relief to him, poor Wimmer died. He wrote us some time ago that he was dying of cancer, beginning the letter with a somewhat whimsical poem. We used to write one another in German, mine pretty unidiomatic and really just a translation verbatim of English.

Though our NSF appeal won't be acted upon until this Fall, we may as well finish it and get it out of the way. When the Garden has completed the necessary copies, please mail them to me. I will then add a Book 5 as sample to each copy, and mail direct from here to Washington. It will reduce the postage outlay by half.

We are a bit confused about how to complete use of the remaining NSF cash until we learn if we shall get a renewal. It would be awkward if I spent ALL and then lacked cash to pay for covers. These may cost 72 cents each. Well, a couple of months should solve the problem.

Aloha,

6/1/61

RESEARCH PROPOSAL SUBMITTED TO  
THE NATIONAL SCIENCE FOUNDATION

for

Continued Publication of Illustrated Descriptions in the  
"Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands"

from

Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

1. Institution: The New York Botanical Garden, Bronx Park, New York 58,  
N.Y.
2. Principal Investigator: Otto Degener
3. Title of Proposed Research: "Publication of Flora Hawaiiensis"
4. Desired Starting Date: The research is already under way with abundant specimens collected; support is desired to publish their illustrated descriptions as soon as this proposal can be activated.
5. Time Period for which Support is Requested: Five years
6. Budget Requested : \$43,632

## Research Proposal to the National Science Foundation

1. Institution: New York Botanical Garden, Bronx Park, New York 58, N.Y.
2. Principal Investigator: Otto D. Degener, Collaborator in Hawaiian Botany
3. Title of Proposed Research: "Publication of Flora Hawaiiensis"
4. Desired Starting Date: The research is already under way with abundant specimens collected; support is desired to publish their illustrated descriptions as soon as this proposal can be activated
5. Time Period for which Support is Requested: Five years

~~XXXXXXXXXXXXXXXXXXXX~~

6. Description and Background of Proposed Research: Thanks to Grant Number G2216 dated January 1956 and its renewal as Grant Number G6377 dated May 1958, the writer and his wife conducted field work as well as study in herbarium and library. As a result of these efforts, the "Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands" has progressed through Book 5 into Book 6. The total number of published pages available to the public comes to just over 2,000.

The Hawaiian Archipelago is so isolated geographically in the Pacific that of its estimated 20,000 - 30,000 different species, varieties and forms of Flowering Plants, all but a fraction of 1% are endemic. This high degree of endemism is not only limited to the Archipelago as a whole, but many taxa are limited to one isolated mountain summit, some arid ridge surrounded by a lush sea of vegetation, some darkly shaded gulch, or some isolated oasis in a barren waste of aa lava.

The continuous discovery and publication of novelties up to the present time indicate that our knowledge of the Hawaiian flora is still far from complete. Many such novelties are collected even in those areas that are rapidly being despoiled of all vegetation due to the ravages of feral goats, cattle, deer, swine, antelope and mouflon, the competition of weeds and of exotic trees planted by the State Government by 'plane and otherwise in the Forest Reserve, and the spread of agriculture. Such des-



61161  
2

truction of the native flora is continuing with ever-increasing fury, and cannot be stopped! Many species, collected by early workers, and even by modern ones like myself, are already extinct and known to us only from herbarium specimens. Many more are on the verge of extinction and should be collected and studied before ~~it~~<sup>it</sup> is too late. We owe to future generations a representative set of herbarium specimens of our unique Hawaiian flora that we, due to commerce, ignorance and vandalism, are rapidly exterminating.

Though the collecting, describing and illustrating of the native flora is of prime importance, the introduced flora must not be neglected. Exotics should be collected as herbarium specimens and preserved as proof of their arrival in the Hawaiian Islands at a certain date. Comparison centuries hence of these pioneers with their descendants in the Islands may give clues as to the rapidity of speciation and other evolutionary problems as yet unformulated.

But to pile up Hawaiian specimens in the main herbaria of the World as I have done since 1922 hardly advances the Science of Botany. The material should be made available as soon as possible in print to botanical institutions in the Islands and elsewhere, and to local schools. So that interested workers should not be obliged to wait many decades before a complete Flora Haw., becomes available, I publish fascicles of various lengths at irregular intervals, distributing 100 sets to them. The remaining copies are stored until a sufficient series accumulate for binding in book form.

The first fascicle appeared June 31, 1952, followed by 61 others and ending with fascicle 12/23/56 as rising printing prices exhausted my modest private fortune. The project was dying. Finally, in desperation, I approached the National Science Foundation for help in 1956, enabling Mrs. Degener and me to publish 24 additional fascicles with the result that Book 5 was completed and Book 6 to 381 pages of the planned 450.

The present appeal for a 5-year grant is to complete Book 6, work up the material collected in the Islands with and without help of the previous NSF grants, and work toward completion of the Flora Hawaiiensis. Actually, this goal can never be attained because of the constant introduction, year after year, by accident and design of species that deserve inclusion in an up-to-date work. The loose-leaf character of the present Flora provides for just such a contingency.

7. Facilities: Our home on the Island of Oahu is available as our laboratory and study. There we have our collection of books and pamphlets about Hawaiian and non-Hawaiian plants, our microscope and other study and writing equipment, and two huge herbarium cases for storing material requiring immediate action as well as material no longer needed and hence awaiting shipment as gifts to 40-odd scientific institutions. In addition, Mrs. Degener and I, through the kindness of its Director, have the use of the library and herbarium of the Bishop Museum in Honolulu. Here are preserved many of our finds, deposited from time to time as gifts.

8. Personnel: Mrs. Degener and I, being childless, would be the permanent personnel, giving essentially full time to this project. Funds are not requested from the National Science Foundation for salaries. In fact, local experience indicates that the purchase of needed plant drawings from artists at prearranged prices is more economical than having an artist on salary.

OTTO DEGENER  
(Principal Investigator)

Born: May 13, 1899, Orange, New Jersey.

Education: Trinity and Collegiate Schools, New York, N.Y.; B.S., Massachusetts Agricultural College (Now University of Massachusetts), 1922; M.S., University of Hawaii, 1925; Sc. D. (hon.), University of Massachusetts, 1952. Post graduate work at Woods Hole, Massachusetts, New York Botanical Garden and Columbia University.

Experience: Instructor in Botany, University of Hawaii, 1925-27. Later Naturalist at Hawaii National Park. Botanist on Anne Archbold Expedition to Melanesia, 1940-41, spending 8 months in Fiji. As a result of botanical exploration the new Ranalian Family Degeneriaceae was named in his honor (See Arthur J. Eames, Morphology of the Angiosperms, 1961.). Study in European herbaria, 1951-52. Botanical consultant for CAA for Canton Atoll, South Pacific. Collaborator in Hawaiian Botany, New York Botanical Garden, 1935-61.

Books: Illustrated Guide to the More Common or Noteworthy Ferns and Flowering Plants of Hawaii National Park with Descriptions of Ancient Hawaiian Customs and an Introduction to the Geologic History of the Islands. 1-312 pp. 1930. Second edition, 1945.

Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands. Books 1-5 (Book 6 in collaboration with Mrs. Degener over 75% completed.) Over 2,000 pp. 1932-61.

Naturalist's South Pacific Expedition: Fiji. 1-303 pp. 1949.

Dr. I. Hansen DEGENER  
(Research Associate)  
Actually Co-author

Education: Student in the Natural Sciences, Albert-Ludwig University, Freiburg, Baden, West Germany, 1944; Dr. rer. nat. (Dr. Natural Sciences), magna cum laude, Friedrich-Wilhelm University, Berlin, 1949. Botanical assistant at the Botanisches Museum, Berlin-Dahlem, 1945-46; lecture and laboratory assistant to Drs. R. Pilger and H. Sleumer, Berlin-Dahlem, 1948-49; botanist, ditto, 1949-53; assistant in pharmacognosy at the Freir Universitaet, Berlin-Dahlem.

Publications: (as I. Hansen) Europaeische Arten der Gattung Erica L. Bot. Jahrb. 75:1-81. 1950 (With Gerloff, J.) Beitrage zur Kenntniss einiger Volecales. Berl. Deutsch. Bot. Gesell. 65 (4):87-93. 1952. (As I. Degener with O. Degener), Nutzpflanzen der Eingeborenen von Fidschi. Mitt. Bot. Gart. u. Mus. Berl.-Dahl. 1:1-20. 1953. (I. Degener, with E. Potztal),



Beiträge zur Anatomie und Systematik der Leptureae. Bot. Jahrb. 76: 251-270. 1954. Co-author and collaborator in most articles with her husband since her marriage in 1953.

Shorter Articles in Scientific Journals: To date my (since our marriage Dr. Isa Degener is mostly included) collections, my observations, my illustrations or descriptions of interesting finds or of novelties by myself and mostly collaborators are scattered ~~under~~ <sup>in</sup> 200 papers by about 90 authors, principally systematic botanists. The list, comprising 12 pages, was submitted May 15, 1961 to the National Science Foundation in my appeal for a grant to continue field work in the Hawaiian Islands. This list is uncritical and incomplete as I lack access in the Islands to some references. It shows, however, that it has ever been my purpose to ~~spread~~ <sup>spread</sup> our knowledge of the flora of the South Seas. As announced about twenty-five years ago in "An Opportunity to Cooperate in the Study of Hawaiian Plants" (Torreya 33 : 158), my specimens have been available for study to any qualified specialist anywhere.

9. Budget Estimate (5 years) The project would result in several books similar to Book 5, herewith submitted as sample. The printer chosen would be the newspaper, "The Honolulu Advertiser," which in the Hawaiian Islands owns the various fonts, such as italics, BOLD, French accents, needed. No funds are requested for additional research, typing, editing, indexing, travel, etc., but for full-page drawings, collating, binding, and making covers for three volumes in an edition of 3,000 copies. No other support is requested from the Foundation excepting for the appeal submitted May 15, 1961 for funds for continued field work. Books 1 to 4 were sold retail at \$3.50 each, but Book 5, because of higher prices, is being sold retail at \$5.00. I believe Book 6 should be priced similarly. As in the past, several hundred copies would be distributed gratis to institutions and colleagues, the remainder being offered for sale privately and through museum and other book shops. The cost of distribution is not included in the estimate below as it would be usually absorbed by the \$5



purchase price. From past experience and from records of past expenses submitted during the past five years for NSF files, I come to the following tentative summary:

	BOOK 6 1961	BOOK 7 1962	BOOK 8 1963	BOOK 9 1964	BOOK 10 1965plus	TOTAL
3000 book covers @ 72 cents	2160 (cover)	-	2160 (cover)	-	2160 (cover)	6480
Collating, binding, etc.	2000	-	2000	-	2000	6000
Drawings @ \$25	Backlog 1575 available	1575	1575	1575	1575	6300
	(63 drawings each for four years)					
Sheets with 2 text, 1 out @ \$48	3025 (63 sheets)	3025 (63 sheets)	3025 (63 sheets)	3025 (63 sheets)	3025 (63 sheets)	12100
	(63 sheets each for four years)					
Sheets with 2 text @ \$35.75	930 (26 sheets)	930 (26 sheets)	930 (26 sheets)	930 (26 sheets)	930 (26 sheets)	3720
	(26 sheets each for four years)					
Sheets with 1 text @ \$21	440 (21 sheets)	440 (21 sheets)	440 (21 sheets)	440 (21 sheets)	440 (21 sheets)	1760
	(21 sheets each for four years)					
Salaries of - Drs. Degener	-	-	-	-	-	-
TOTAL DIRECT COSTS \$ 5160	\$ 5970	\$ 10130	\$ 5970	\$ 10130	\$ 5970	\$ 36360
INDIRECT NYING COSTS 1032	1194	2026	1194	2026	1194	7272
TOTAL						\$ 43632

(If the above is excessive, I advise reducing the issue from the above estimate for 3,000 copies to 2,000 copies or even less.)

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Otto Degener, Principal Investigator

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William C. Steere, Director  
The New York Botanical  
Garden

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Robert F. Kolkebeck, Assistant Director and  
Business Manager  
The New York Botanical  
Garden

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NATIONAL SCIENCE FOUNDATION  
WASHINGTON 25, D.C.

June 2, 1961

Dr. Otto Degener  
Waialua, Oahu, Hawaii

Dear Otto:

Thank you very much for sending the two books on the vegetation of the Islands. I will indeed want to spend some time going over them before I visit the various islands previous to the Congress meetings.

I look forward to seeing you in August.

Cordially yours,

*David D. Keck*  
CKH

David D. Keck  
Program Director for  
Systematic Biology

The New York Botanical Garden

BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
FREDERICK S. MOSELEY, JR., *Vice President*  
MRS. HERMANN G. PLACE, *Vice President*  
R. GORDON WASSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

June 6, 1961

Dr. Otto Degener  
Waialua  
Oahu, Hawaii

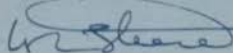
Dear Dr. Degener:

We have received your letter of June 1 and the draft of your proposal. We will mimeograph this and get it into your hands soon as Book V should probably be added to at least the first few copies. We will let you know as soon as possible what the decision of the National Science Foundation is, so that you will know how to spend what funds are still available to you.

This proposal will be considered as soon as it reaches the National Science Foundation since the section that takes care of publications does not have a set deadline for receipt of proposals or a regular meeting of the panel to make recommendations for or against support.

In reading your proposal, one idea occurs to me and that is that because of its much more convenient location the Bishop Museum might be willing to sponsor your proposals--either the present ones or those in the future. Actually, this would give you the advantage of proximity to the budgetary office in case of questions. Moreover, I have a very strong suspicion that your chances of support might be greater in Hawaii than they would be in New York because of the much greater volume of requests that go to Washington from this state than from yours. I am sure that Dr. Spoehr could give you a good evaluation of this point, from his own experience. Please do not think that we are reducing our interest in your program--nothing of the kind. However, it might be much more convenient for you to have the financial arrangements for your program in Hawaii and of this we will let you be the judge.

Sincerely yours,



William C. Steere  
Director

WCS/gd



June 9, 1961.

Dear Dr. Steere:

It was nice getting your letter and to learn that the publication-fund decisions are made by NSF at frequent intervals. As I remember, Washington wants 20 copies. On receiving the copies the garden has revised and stenciled here in Waiialua, I will mail them wrapped separately with 20 Flora Hawaiiensis Book 5 copies to the proper NSF address. Psychologically, it should make a better impression for each examiner to have a book before him than to be passing a scant number of books hither and yonder from man to man. As 20 books will entail something of a postage bill, Isa & I thought it rather extravagant to mail 20 books first to the Garden, and then to have the Garden affix new sets of stamps to get the weighty 20-book package to NSF.

I don't like to seem catty - such attitude usually boomerangs - but so long as St. John is connected with the Bishop Museum, Isa & I would rather not have any official connection with his institution. He still retains a home in Honolulu. Anyway, I am still a New Yorker at heart; feel loyalty to the Garden which I used to visit with my parents annually from baby days on and where the best set of my plants are stored; and, as you know, still have my relatives in and about Manhattan. Though Dr. Specht is a grand person, I have had considerable annoyance thanks to the saint. Even a year or so ago, when we two happened to be alone in the herbarium - it closes officially at 3:30 - he questioned whether I had the right to remain there at that late hour! For years I have been criticised publicly in his Univ. lectures. When Skottsberg & I under a previous administration wanted to publish a paper on Figara in the Museum's Oceana Papers, objections were raised so that we withdrew it; an article to Local Pac. Science, of which the saint was bot consultant or something, was returned. When Sheriff & I about 30 years ago wanted to monograph Peles and Cyrtandra, two genera out of many found in the Islands, specimens of precisely those two genera could not be borrowed from Bishop because it just happened (!) that the saint was working on them. Now I learn from Dr. B.C. Stone, the saint's former assistant and now working on Peles at the Smithsonian, St. J. told him that he withheld Peles so that Sheriff could not monograph the genus. Sheriff has been a prodigious worker on the genera in Hawaii thanks to my cooperation and leg work. The saint accused Sheriff, who owns no herbarium of his own, of having stolen Bishop Museum specimens sent him on loan! Hence Sheriff was no longer permitted to borrow anything any more. Next Fernald, under whom the saint studied at Harvard, refused Sheriff loans because of his evil reputation! I finally put an end to this sabotage. The saint early was given the cold shoulder by colleagues in Pullman, and finally received

similar treatment from colleagues at the Univ. of Haw. Though Hawaii is supposed to be a Paradise of the Pacific, accumulation of trivial incidents does leave a bitter taste in the mouth. With part-Maori Peter Buck, Director before Dr. Spoehr, and part-Indian St. John (meow, meow, meow), monographic work was impossible for me and hence a loose-leaf Flora was the most practicable. The minute I could work up a single species, I burst into print.

In answer to your query whether you or Dr. Spoehr should supervise NSF, Isa & I are 100% for you. Should we be refused a renewal ~~of~~ of our grant, perhaps we could apply as individuals. Page 2 of the Jan. 1960 NSF instructional booklet permits such a method. The brassiness of it and perhaps Arthur Eames' 1961 "Morphology of the Angiosperms" may shock the examiners' routine in our favor.

We have unexpectedly gotten a few cash-saving invitations from out-side islands so plan to dash off for field work next month. We shall accept the invitation to the dedication ceremonies of Haleakala National Park, representing the Garden unless you write to the contrary. I was Naturalist in the Service, stationed on Hawaii in 1929 and, curiously enough student assistant at Mass. Agr. College when Director Conrad Wirth took Freshman Botany.

Aloha nui loa,

*Osgood and Schubert*

The New York Botanical Garden BRONX PARK • NEW YORK 58 • NEW YORK • LU 4-8500

CHARLES B. HARDING, *President*  
FREDERICK S. MOSELEY, JR., *Vice President*  
MRS. HERMANN G. PLACE, *Vice President*  
R. GORDON WATSON, *Treasurer*  
WILLIAM C. STEERE, *Director*

June 15, 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

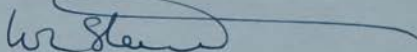
Dear Dr. Degener:

Thank you for your letter of June 9. We will get the proposals off to you before very long in order that you can get them into Washington accompanied by the books. I suspect your psychological analysis in the situation is quite correct.

I am glad you feel the way you do about the Garden and that you wish to have us continue to administer your grants in the future. Of course, I had not known of the St. John situation, although I have heard Harold Coolidge and others on this same topic. I can understand your wish now to have your grants not in the hands of the Bishop Museum, or even of the University of Hawaii.

Dorothy and I shall probably attend the Pacific Science Congress late in August and will look forward to seeing you then if you are not out botanizing on some other island.

Sincerely yours,



William C. Steere  
Director

WCS/gd

cc: Mr. Kolkebeck

June 19, 1961.

Mr. John T. Wilson,  
Biological & Medical Sciences,  
National Science Foundation,  
Washington 25, D.C.

Dear Mr. Wilson:

Many thanks for ending June 29 Mrs. Degener and my suspense regarding "Flora Hawaiiensis" (B-10617) field work. We received your letter on our return from a couple of weeks botanizing on Molokai, Maui and Hawaii. We took advantage of stop-over privileges to cut expenses. After spending 39 years on this project, it is time I should curtail my activities on the fast-vanishing Hawaiian flora anyway.

I am grateful to NSF for the two past grants which have enabled the deposit of Hawaiian herbarium specimens as gifts to about 40 institutions in the United States and elsewhere, and the amassing of a huge back-log of specimens that will take botanists generations to work up. Hence past aid by NSF has not ended with the end of funds.

Our recent field work shows that Mainland ragweed has become naturalized on Molokai; orchard grass has exterminated the endemics of Koolau Gap on Maui; and a melastome, a eupatorium and the fountain grass are taking over huge areas on the Island of Hawaii. We are glad we have been able to save for herbaria at least many plants that will be extinct within a decade, and it is due to the foresight of NSF to have made this efficiently possible.

Yours sincerely,



The New York Botanical Garden BRONX PARK · NEW YORK 58 · NEW YORK · LU 4-8500

June 21, 1961  
Air Mail

Dr. Otto Degener  
Waiialua  
Oahu  
Hawaii

Dear Dr. Degener:

Enclosed is your typed copy of the proposal which we mimeographed on June 19, 1961. Twenty copies of the proposal were sent to you on that date. All copies should be dated and your signature should be affixed to the copy already signed by Dr. Steere and Mr. Kolkebeck.

Sincerely yours,

*Mildred Davis*  
Mildred Davis  
Secretary to Robert F. Kolkebeck



(Helo Degener)

WAILUA, OAHU, HAWAII

June 24, 1961.

National Science Foundation,  
Office of Science Information Service,  
Publications & Information Services,  
Washington 25, D.C.

Dear Sirs:

Not knowing how long the shipping strike will continue, I am herewith taking the liberty of submitting the duly signed research proposal for continued publication of the "Flora Hawiianensis" to you by air mail. The remaining nineteen copies of the proposal and nineteen sample books are being sent by surface mail because of the great weight of the package.

Yours sincerely,

*Dr. Otto Degener*

*June 24, 1961 is date on application*

RESEARCH PROPOSAL SUBMITTED TO  
THE NATIONAL SCIENCE FOUNDATION

for

Continued Publication of Illustrated Descriptions in the  
"Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands"  
from

Otto Degener  
Nokuleia Beach  
Oahu, Hawaii

1. Institution: ~~The~~ New York Botanical Garden, Bronx Park, New York 58,  
N.Y.
2. Principal Investigator: Otto Degener
3. Title of Proposed Research: "Publication of Flora Hawaiiensis"
4. Desired Starting Date: The research is already under way with abundant specimens collected; support is desired to publish their illustrated descriptions as soon as this proposal can be activated.
5. Time Period for which Support is Requested: Five years
6. Budget Requested : ~~\$243,632~~ 44,832

6124161

Research Proposal to the National Science Foundation

1. Institution: <sup>Rue</sup> New York Botanical Garden, Bronx Park, New York 58, N.Y.
2. Principal Investigator: Otto D<sup>a</sup>gener, Collaborator in Hawaiian Botany
3. Title of Proposed Research: "Publication of Flora Hawaiiensis"
4. Desired Starting Date: The research is already under way with abundant specimens collected; support is desired to publish their illustrated descriptions as soon as this proposal can be activated
5. Time Period for which Support is Requested: Five years

~~BY ORDER OF THE NATIONAL SCIENCE FOUNDATION~~

6. Description and Background of Proposed Research: Thanks to Grant Number G2216 dated January 1956 and its renewal as Grant Number G6377 dated May 1958, the writer and his wife conducted field work as well as study in herbarium and library. As a result of these efforts, the "Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands" has progressed through Book 5 into Book 6. The total number of published pages available to the public comes to just over 2,000.

The Hawaiian Archipelago is so isolated geographically in the Pacific that of its estimated 20,000 - 30,000 different species, varieties and forms of Flowering Plants, all but a fraction of 1% are endemic. This high degree of endemism is not only limited to the Archipelago as a whole, but many taxa are limited to one isolated mountain summit, some arid ridge surrounded by a lush sea of vegetation, some darkly shaded gulch, or some isolated oasis in a barren waste of aa lava.

The continuous discovery and publication of novelties up to the present time indicate that our knowledge of the Hawaiian flora is still far from complete. Many such novelties are collected even in those areas that are rapidly being despoiled of all vegetation due to the ravages of feral goats, cattle, deer, swine, antelope and mouflon, the competition of weeds and of exotic trees planted by the State Government by 'plane and otherwise in the Forest Reserve, and the spread of agriculture. Such des-



truction of the native flora is continuing with ever-increasing fury, and cannot be stopped! Many species, collected by early workers, and even by modern ones like myself, are already extinct and known to us only from herbarium specimens. Many more are on the verge of extinction and should be collected and studied before it is too late. We owe to future generations a representative set of herbarium specimens of our unique Hawaiian flora that we, due to commerce, ignorance and vandalism, are rapidly exterminating.

Though the collecting, describing and illustrating of the native flora is of prime importance, the introduced flora must not be neglected. Exotics should be collected as herbarium specimens and preserved as proof of their arrival in the Hawaiian Islands at a certain date. Comparison centuries hence of these pioneers with their descendants in the Islands may give clues as to the rapidity of speciation and other evolutionary problems as yet unformulated.

But to pile up Hawaiian specimens in the main herbaria of the World as I have done since 1922 hardly advances the Science of Botany. The material should be made available as soon as possible in print to botanical institutions in the Islands and elsewhere, and to local schools. So that interested workers should not be obliged to wait many decades before a complete Flora Haw. becomes available, I publish fascicles of various lengths at irregular intervals, distributing 100 sets to them. The remaining copies are stored until a sufficient series accumulate for binding in book form.

The first fascicle appeared June 31, 1932, followed by 61 others and ending with fascicle 12/23/38 as rising printing prices exhausted my modest private fortune. The project was dying. Finally, in desperation, *The New York Botanical Garden* *on my behalf* approached the National Science Foundation for help in 1956, enabling Mrs. Degener and me to publish 24 additional fascicles with the result that Book 5 was completed and Book 6 to 381 pages of the planned 450.

The present appeal for a 5-year grant is to complete Book 6, work up the material collected in the Islands with and without help of the previous NSF grants, and work toward completion of the Flora Hawaiiensis. Actually, this goal can never be attained because of the constant introduction, year after year, by accident and design of species that deserve inclusion in an up-to-date work. The loose-leaf character of the present Flora provides for just such a contingency.

7. Facilities: Our home on the Island of Oahu is available as our laboratory and study. There we have our collection of books and pamphlets about Hawaiian and non-Hawaiian plants, our microscope and other study and writing equipment, and two huge herbarium cases for storing material requiring immediate action as well as material no longer needed and hence awaiting shipment as gifts to 40-odd scientific institutions. In addition, Mrs. Degener and I, through the kindness of its Director, have the use of the library and herbarium of the Bishop Museum in Honolulu. Here are preserved many of our finds, deposited from time to time as gifts.

8. Personnel: Mrs. Degener and I, being childless, would be the permanent personnel, giving essentially full time to this project. Funds are not requested from the National Science Foundation for salaries. In fact, local experience indicates that the purchase of needed plant drawings from artists at prearranged prices is more economical than having an artist on salary.

OTTO DEGENER  
(Principal Investigator)

Born: May 13, 1899, Orange, New Jersey.

Education: Trinity and Collegiate Schools, New York, N.Y.; B.S., Massachusetts Agricultural College (now University of Massachusetts), 1922; M.S., University of Hawaii, 1925; Sc. D. (hon.), University of Massachusetts, 1952. Post graduate work at Woods Hole, Massachusetts, New York Botanical Garden and Columbia University.

60124/61  
4

Experience: Instructor in Botany, University of Hawaii, 1925-27. Later Naturalist at Hawaii National Park. Botanist on Anne Archbold Expedition to Melanesia, 1940-41, spending 8 months in Fiji. As a result of botanical exploration the new Ranalian Family Degeneriaceae was named in his honor (See Arthur J. Eames, Morphology of the Angiosperms. 1961.). Study in European herbaria, 1951-52. Botanical consultant for CAA for Canton Atoll, South Pacific. Collaborator in Hawaiian Botany, New York Botanical Garden, 1935-61.

Books: Illustrated Guide to the More Common or Noteworthy Ferns and Flowering Plants of Hawaii National Park with Descriptions of Ancient Hawaiian Customs and an Introduction to the Geologic History of the Islands. 1-312 pp. 1930. Second edition, 1945.

Flora Hawaiiensis or New Illustrated Flora of the Hawaiian Islands. Books 1-5 (Book 6 in collaboration with Mrs. Degener over 75% completed.) Over 2,000 pp. 1932-61.

Naturalist's South Pacific Expedition: Fiji. 1-303 pp. 1949.

Dr. I. Hansen DEGENER  
(Research Associate)  
Actually Co-author

Education: Student in the Natural Sciences, Albert-Ludwig University, Freiburg, Baden, West Germany, 1944; Dr. rer. nat. (Dr. Natural Sciences), magna cum laude, Friedrich-Wilhelm University, Berlin, 1949. Botanical assistant at the Botanisches Museum, Berlin-Dahlem, 1945-46; lecture and laboratory assistant to Drs. R. Pilger and H. Sleumer, Berlin-Dahlem, 1948-49; botanist, ditto, 1949-53; assistant in pharmacognosy at the Freir Universitaet, Berlin-Dahlem.

Publications: (as I. Hansen) Europaeische Arten der Gattung Erica L. Bot. Jahrb. 75:1-81. 1950 (With Gerloff, J.) Beitrage zur Kenntnisse einiger Völvocales. Berl. Deutsch. Bot. Gesell. 65 (4):87-93. 1952. (As I. Degener with O. Degener), Nutzpflanzen der Eingeborenen von Fidschi. Mitt. Bot. Gart. u. Mus. Berl.-Dahl. 1:1-20. 1953. (I. Degener, with E. Potztal),



Beitraege zur Anatomie und Systematik der Leptureae. Bot. Jahrb. 76: 251-270. 1954. Co-author and collaborator in most articles with her husband since her marriage in 1953.

Shorter Articles in Scientific Journals: To date my (since our marriage Dr. Isa Degener is mostly included) collections, my observations, my illustrations or descriptions of interesting finds or of novelties by myself and mostly collaborators are scattered in over 200 papers by about 90 authors, principally systematic botanists. The list, comprising 12 pages, was submitted May 15, 1961 to the National Science Foundation in my appeal for a grant to continue field work in the Hawaiian Islands. This list is uncritical and incomplete as I lack access in the Islands to some references. It shows, however, that it has ever been my purpose to ~~spread~~<sup>2</sup> our knowledge of the flora of the South Seas. As announced about twenty-five years ago in "An Opportunity to Cooperate in the Study of Hawaiian Plants" (Torreya 33 : 158), my specimens have been available for study to any qualified specialist anywhere.

9. Budget Estimate (5 years) The project would result in several books similar to Book 5, herewith submitted as sample. The printer chosen would be the newspaper, "The Honolulu Advertiser," which in the Hawaiian Islands owns the various fonts, such as italics, BOLD, French accents, needed. No funds are requested for additional research, typing, editing, indexing, travel, etc., but for full-page drawings, collating, binding, and making covers for three volumes in an edition of 3,000 copies. No other support is requested from the Foundation excepting for the appeal submitted May 15, 1961 for funds for continued field work. Books 1 to 4 were sold retail at \$3.50 each, but Book 5, because of higher prices, is being sold retail at \$5.00. I believe Book 6 should be priced similarly. As in the past, several hundred copies would be distributed gratis to institutions and colleagues, the remainder being offered for sale privately and through museum and other book shops. The cost of distribution is not included in the estimate below as it would be usually absorbed by the \$5



Otto Degener

Otto Degener, Principal Investigator

---

William C. Steere, Director,  
The New York Botanical  
Garden

---

Robert F. Kolkebeck, Assistant Director and  
Business Manager,  
The New York Botanical  
Garden

---

June 27, 1961.

Dear Mr. Countey:

Mrs. Degener & I are off to botanize Friday morning on Molokai, Maui, Hawaii and Lanai and therefore are mailing you our semi-annual accounting a bit early. It involves the time between Dec. 20, 1960 and June 24, 1961.

EXPENSES:

1. Drawings, etc.	\$ 173.80
2. Printing & Collating	1,206.10
3. Trip to Kauai	198.79
4. Postage	147.50
5. Metal corrugates	80.00
6. Car	291.10
7. "Red purse" (expenses each below \$25)	87.98
TOTAL EXPENSES	<u>\$ 2,175.27</u>

CASH ON HAND:

Dec. 20, 1960	\$ 438.70
Jan. 5, 1961	1,518.12
Feb. 8, 1961	1,044.89
Feb. 13, 1961	248.16
April 7, 1961	382.78
May 15, 1961	45.28
May 17, 1961	45.50
TOTAL CASH RECEIVED:	<u>\$ 3,721.40</u>
TOTAL SPENT:	<u>2,175.27</u>
CASH ON HAND JUNE 24, 1961:	<u>\$ 1,546.13</u>

We will be back the third week of July and out of reach of mail until that time.

Aloha,

Good Only to Persons  
to Whom Issued

TERRITORY OF HAWAII  
BOARD OF AGRICULTURE AND FORESTRY  
DIVISION OF FORESTRY

PERMIT

Permission is hereby granted to Otto Degener, Waialeale,  
Oahu to enter forest area to collect  
botanical specimens from July 1, 1961  
to June 30, 1962 on island of Oahu.  
(Oahu & Enderb. Waialeale)

Provided, that the provisions of Chapter 16, R. L. H. 1945, and any other laws applicable thereto, and all rules and regulations of the Board of Agriculture and Forestry pertaining to forestry shall be strictly observed.

6/28, 1961 Walter H. Hall

Territorial Forester.

HAWAII PRINTING

Good Only to Persons  
to Whom Issued

TERRITORY OF HAWAII  
BOARD OF AGRICULTURE AND FORESTRY  
DIVISION OF FORESTRY

PERMIT

Permission is hereby granted Otto Degener, Waialeale  
Oahu to enter State lands of Kauai  
Forest Reserve from July 1, 1961 to June 30,  
1962-- collect botanical specimens

Provided, that the provisions of Chapter 16, R. L. H. 1945, and any other laws applicable thereto, and all rules and regulations of the Board of Agriculture and Forestry pertaining to forestry shall be strictly observed.

6/28, 1961 W. H. Hall

Territorial Forester.

HAWAII PRINTING

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

JUN 29 1961

Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

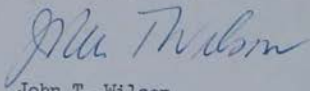
Dear Dr. Degener:

We regret to inform you that the National Science Foundation is unable to support your research proposal.

In evaluating each proposal submitted to the Foundation, a number of factors are considered. They include the following: the scientific merit of the proposal and its merit in relation to other proposals received by the Foundation in the same general field of science; the relation of the proposal to contemporary research in the field; the distribution among fields of science within the program of the Foundation; the geographical distribution of research support by the Foundation; and, finally, the funds available for research support. Thus, many excellent proposals cannot be supported for reasons aside from intrinsic merit, although this is an important consideration.

Even though we are unable to support this proposal, we would be pleased to consider other research proposals which you might wish to submit.

Sincerely yours,



John T. Wilson  
Assistant Director for  
Biological and Medical Sciences

cc: Business Office, New York Botanical Garden

B-10617  
"Flora Hawaiiensis"





## LIMITED TERM ACCIDENT POLICY

**FIREMAN'S FUND INSURANCE COMPANY**

SAN FRANCISCO

AT 639377

BISHOP INSURANCE AGENCY, LTD.

1347 KAPIOLANI BLVD.

P. O. BOX 3050 TEL. 992-9311

A Stock Company Herein Called The Company

HEREBY INSURES the person named in the schedule hereof (hereinafter called the Insured) and subject to the provisions, exclusions and conditions of this policy, promises to pay indemnity for loss resulting from injury, to the extent herein provided.

"Injury" wherever used in this policy means bodily injury caused by an accident occurring while this policy is in force and resulting directly and independently of all other causes in loss covered by this policy.

This policy takes effect on the date and hour stated in the Schedule and expires on the same hour at the end of the number of days stated in the Schedule as Term of Coverage at the residence of the insured.

This policy is issued in consideration of payment in advance of the premium stated in the Schedule.

## SCHEDULE

Name of Insured		Premium	
WILLIAM R. CADENHEAD		\$ 29.60	
Address		City	State
68-615 Crozier Drive, Waiialua, Oahu			Hawaii
Name of Beneficiary		Relationship	
MILDRED C. CADENHEAD		Wife	
Principal Sum	Term of Coverage	Effective at:	Date
\$ 50,000.00	17 Days	Hour 7:30	A.M. June 29, 1961
			Mo. Day Yr.

## Part I

## SPECIFIC LOSS INDEMNITY

When injury results in any of the following losses within one hundred twenty days after the date of the accident, the Company will pay for loss of:

Life	The Principal Sum
Both Hands or Both Feet or Sight of Both Eyes	The Principal Sum
One Hand and One Foot	The Principal Sum
One Hand or One Foot and Sight of One Eye	The Principal Sum
One Arm or One Leg	The Principal Sum
One Hand or One Foot or Sight of One Eye	One-half of Principal Sum
	One-fourth of Principal Sum

"Loss" as used above with reference to hand or foot means complete severance through or above the wrist or ankle joint, as used with reference to arm or leg means complete severance through or above the elbow or knee joint, and as used with reference to eye means the irrecoverable loss of the entire sight thereof. No indemnity will be paid under any circumstances for more than one of the losses, whichever is the greatest, for which provision is made in this part.

The occurrence of any specific loss for which indemnity is payable under this Part shall at once terminate all insurance under this policy but such termination shall be without prejudice to any claim originating out of the accident causing such loss.

## Part II

## PHYSICIAN, SURGEON, HOSPITAL AND NURSE EXPENSE

If such injury, commencing within twenty-six weeks after date of accident, requires treatment by a legally qualified physician or surgeon, confinement within a hospital, employment of a licensed or graduate nurse, X-ray examination or the use of an ambulance, the Company will pay, in addition to any other indemnity payable, the expense actually incurred therefor by the Insured but not to exceed in the aggregate an amount equal to \$500 for each \$5,000 of the Principal Sum stated in the Schedule as the result of any one accident.

## Part III

## EXPOSURE AND DISAPPEARANCE

When by reason of an accident covered by this policy the Insured is exposed to the elements and as the result of such exposure suffers a loss for which indemnity is otherwise payable hereunder, such loss shall be covered under the terms of this policy.

If the body of the Insured has not been found within one year after the date of the disappearance, sinking or wrecking of the vehicle in which the insured was riding at the time of the accident and under such circumstances as would otherwise be covered hereunder, it will be presumed that the Insured suffered loss of life resulting from bodily injury caused by an accident at the time of such disappearance, sinking or wrecking.

## Part IV

## EXCLUSIONS

This policy does not cover death, disability, medical expense or other loss caused by or resulting from: (a) bacterial infection other than pyogenic infection which shall occur through an accidental cut or wound; (b) any other kind of disease; (c) war, or any act of war, (whether war is declared or not) or suffered by the Insured while in the military or naval service of any country at war (whether war is declared or not) or engaged in armed conflict, (any premium paid to the Company for any period not covered by this policy while the Insured is in such service will be returned on a pro rata basis); nor does this policy cover: (d) injury sustained while participating in professional athletics; (e) injury sustained by the Insured while operating, learning to operate, or serving as a member of a crew of an aircraft, or while traveling or flying in any aircraft operated by or under the direction of any military (land, sea or air) authority or any aircraft being used for any test or experimental purpose; (f) suicide (sane or insane) or any attempt thereof; (g) intentionally self-inflicted injuries.

ASSUMPTION OF RISK AND LIABILITY

In consideration of the right and privilege of joining and accompanying OTTO DEGENER and ISA IRMGARD DEGENER, husband and wife, hereinafter called the Party of the First Part, for the purposes of botanizing, hiking, mountain climbing, camping, or any and all other activities, we/I, the undersigned, fully aware of the risks involved, William R. Ladendorff,  
(names)  
of 68-615 Crozier Dr., Waukegan,  
(address)  
for myself, my,  
(myself, ourselves) (my, our)  
heirs, executors, administrators and other legal representatives, hereby agree(s) to and shall assume all risks, liabilities and damages that may arise from any accident, injury or damage to the undersigned arising out of the aforementioned activities at any time and place.

And the undersigned, for myself, my,  
(myself, ourselves) (my, our)  
heirs, executors, administrators and other legal representatives, further agree(s) and covenant(s) to indemnify and save harmless the Party of the First Part against any and all claims, actions, suits and damages arising from any accident, injury or damage suffered by the undersigned as a result of the aforementioned activities, and from and against all costs, counsel fees, expenses, and liabilities incurred in or about any such claim or action or proceeding brought thereon.

Dated: June 29, 1961.

William R. Ladendorff  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

July 10, 1961

Dr. Otto Degener  
Waialua, Oahu, Hawaii

Dear Otto:

Your postal of June 27 is received telling of the field work to come on four of the outer islands. It is most kind of you and Isa to invite me to join you. I certainly wish I could! I settle instead for two days on Kauai, one day on Maui and two days on Hawaii prior to the Congress. Marjorie will be with me and we will be drinking in the scenery. I hope your trip is very productive.

I am sorry your recent proposal did not make the grade this time. More field trips like the present one could have been beneficial to the cause.

We look forward to seeing you next month.

Cordially yours,



David D. Keck  
Program Director for  
Systematic Biology

Aloha,

By finding your rights during the day you can give the "family plan",  
different islands but round trip with stop-over privileges. We find  
"Haw. Airlines" better than "Aloha".  
On your way from Oahu to Maui, why not stop-over on Molokai for a  
day without extra charge, renting a U-Drive from Mr. Ugg.  
Now that we are no longer associated officially it will be so nice  
having you and Mrs. Keck visit us here at the Beach socially. No one  
could accuse us of influence-peddling or trying to "butter you up" by  
it.



July 21, 1961.

Dear Dave:

On returning from our field trip we received the NSF news that the Flora Haw., grant cannot be renewed. Thanks to the past two grants we have a tremendous backlog of critical material waiting for study. It will be enough to last us a life-time. We are grateful for the past advantages and not spoiled or disgruntled by the discontinuance.

Expecting a possible curtailment of funds thanks to a warning by Dr. Steere, we have inexpensively published in *Phytologia* "A new *Dodonaea* from Molokai, Hawaii." The Gouldia article, being perhaps controversial because of Ray's vehement lumping attitude, we printed privately without NSF mention.

Don't feel sorry about the recent proposal not making the grade. It is much more difficult for you to help your proteges than for McVaugh when Robbins did not charge a cent for sponsoring the grant, nor for Al Smith when Steere charged 15%. Steere's present "tax" of 20% is simply killing the goose that lays the golden egg.

"That more field trips like the present one could have been beneficial to the cause," as you express it, may be true enough. But with the cash available, it was impracticable. The minimum wage is \$1.25 per hour. You Washingtonians forget that I am over 60 and no longer crisp & fresh as formerly. I can't push through *Dicranopteris* tangles as of yore and my only practicable way to get into the field is when out tenant, in the Air Force, can get leave and will help us collect for his board, keep & transportation. He benefits by seeing the other islands.

On Kauai you can live at the Government cottage at beautiful Kokee for about \$5.00 per couple; on Maui at the Pioneer Inn in Lahaina for \$5.00 per person, at the Okada Store in Hana for \$5.00 per couple; while on Hawaii at the Cunningham Hotel in Hilo for \$5.00 per couple and at Andrade's in Kohala for \$6.00 per person. The places are hardly tourist hostels but if you are prepared to rough it a bit with Mrs. Keck and economize, this is the way to travel. You may get some surprises, as we did with showers. We were rather disgusted when we flew from New York to Honolulu last year as ordinary tourists and met a young acquaintance with a Government grant having the audacity to fly on the same plane the red carpet way. What did he think grant money was to be used for anyway?!!



NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

Office of Science Information Service

July 12, 1961

VIA AIR MAIL

Dr. Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

Dear Dr. Degener:

This will acknowledge receipt of your letter of June 24, 1961, enclosing a copy of a proposal requesting Foundation support for continued publication of the Flora Hawaiiensis. The nineteen copies of the proposal and the sample books have also been received.

Your budget includes indirect costs at 20%. While the Foundation does allow 20% indirect costs for research grants, indirect costs in grants for support of scientific publications are limited to a maximum of 15% of direct costs. However, in the case of direct printing costs we pay no overhead. If your budget contained items for editorial work, mailing, etc., these costs would be eligible for 15% overhead. Thus the total amount of the proposal would be \$37,360.

The proposal has been assigned to Mrs. Ileen E. Stewart, Assistant Program Director, for processing in accordance with the customary procedures of the Foundation. Because of the workload, processing is taking approximately six months. I should mention that competition for our Fiscal Year 1962 funds will be extremely keen as we are receiving many more proposals than we have funds to grant.

Mrs. Stewart will doubtlessly be writing to make further comments on your budget and the proposal generally.

Sincerely yours,

*Ralph O'Dette*

Ralph E. O'Dette  
Program Director for  
Support of Scientific Publications

Copy to:

Dr. William C. Steere  
Mr. Robert F. Kolkebeck

*del.*

July 19, 1961.

Dear Al:

Isa & I just returned from a couple of weeks' botanizing on Molokai, Maui and Hawaii. We got some nice things of which you will eventually get a set.

On our return from Hawaii we found John T. Wilson's June 29 letter awaiting us with the news that our NSF research proposal B-10617 would be discontinued. Dr. Steere months ago wrote that it was increasingly difficult to get additional grant renewals because new workers likewise must be given a chance for aid. Hence the curtailment of funds for "Flora Hawaiiensis" is not a complete surprise to us. We might have gotten a renewal, Keck writes, had we engaged in more field work. But Keck does not realize that with a basal wage of \$1.25 per hour and yours truly not as crisp and young as in years past, rigorous camping as in Fiji is a thing of the past. Nevertheless, with experience in Haw. terrain, I know pretty well where to reach worth while endemics within a 5 mile radius of available jeep and other roads. I am in the pink of condition considering my years but a 15 mile hike up and down hill, partly through Dicranopteris, is followed at night by nasty cramps in thighs and legs. That is a pretty good sign I am forcing myself unreasonably.

Married, I must be practicable. As you know, in the past I mailed duplicate herb specimens to about 40 institutions or individuals gratis. In postage alone this comes to quite a sum annually. To keep remain botanically still a bit active, Isa & I plan letting botanical income finance botanical activity. So on official termination of the present grant I should charge for specimens, fascicles, books and postage rather than letting all this potential lucre skip through my fingers. The sum total should be enough for an outside island collecting trip OR the printing of a 32-page fascicle yearly.

Now regarding the Smithsonian: Maxon always sent me franks for mailing specimens to him. Can you do likewise? And when I mail herb specimens to you, can you purchase them at their value TO THE SMITHSONIAN? It would be up to you to decide whether a Century is worth \$5, 10, 15 or 25 on receiving it. I don't intend to start haggling with anyone. Such an arrangement should begin when the present NSF grant has definitely ended. It still has some months to go.

We are certainly grateful for the past grants and not spoiled by having enjoyed them. We shall simply fall back to our slower, frugal, pre-NSF routine. I know you don't agree with me, but the 20% institutional "tax" for sponsoring a grant must be a great deterrent to getting projects passed.

Isa joins in aloha,

July 20, 1961.

Mr. Ralph E. O'Dette,  
Office of Science Information Service,  
National Science Foundation,  
Washington 25, D.C.

Dear Mr. O'Dette,

Mrs. Degener and I have been botanizing on Molokai, Maui and Hawaii and found your informational letter awaiting us on our return home.

Regarding the 20% "indirect costs," this sum is appended by the New York Botanical Garden for sponsoring my application. I am writing Mrs. Ileen E. Stewart that I believe I should submit my proposal to NSF as an individual as allowed on page 2 of your booklet on instructions issued January 1960 to avoid this "tax."

Though I have been a staff member of the New York Botanical Garden since 1935 with the title of Collaborator in Hawaiian Botany, my home has been in the Islands since 1922, and I have never drawn a salary from New York. New York is simply the recipient of my best set of plants gratis; and when I am stuck for lack of library facilities, Dr. Rickett of N.Y.B.G., is my best aid.

Many thanks again for your advice.

Sincerely,



(Hale Degener)

WAILUA, OAHU, HAWAII

July 20, 1961.

June 20, 19

Mrs. Ileen E. Stewart,  
Office of Science Information Service,  
National Science Foundation,  
Washington 25, D.C.

Dear Mrs. Stewart:

Mr. Ralph O'Dette July 12 wrote me that you are processing the budget for continued publication of the "Flora Hawaiiensis."

I have explored the Hawaiian Islands almost without interruption for almost forty years for plants, depositing my finds in leading museums in America and Europe. Now past sixty, it is prudent from a health standpoint that I curtail my collecting and spend correspondingly more time in describing the flora I know so well from living plants rather than from dry, museum specimens. As you know, from the sample submitted, Mrs. Degener and I are working on the sixth volume of the "Flora Hawaiiensis" thanks to a grant from your Foundation; and from your knowledge of costs in producing books, you can see that we always considered NSF grants as aid to help us finance a work that we cannot finance 100% alone. Such aid we supplement with private funds not needed for our frugal living with the idea of speeding our magnus opus to a successful conclusion.

During my first grant, under sponsorship of former Director William J. Robbins of the New York Botanical Garden, no charge for indirect costs was taken from the funds allotted by NSF to the project. During my second grant, under the Directorship of Dr. Steere, 15% was charged. For the present appeal for aid, now in your hands, the N.Y. Bot. Garden (as the Feb. 10 letter indicates) requests a charge for indirect costs of 20% instead of 15%.

The entire project, lasting five years, can be reduced by the \$7,472 charged to "Indirect Costs" if NSF will permit me to submit my proposal as an individual (as specified on page 2 of your booklet of instructions dated January 1960). I doubt that Dr. Steere would object: 1.) Because I have been a staff member of the N.Y.B.G., since 1935 without any salary whatsoever, and 2.) In his letter of June 6, 1961 to me he remarks: "In reading your proposal, one idea occurs to me and that is that because of its much more convenient location the Bishop Museum (in Honolulu) might be willing to sponsor your proposal - either the present ones or those in the future." Evidently Dr. Steere would not care particularly if N.Y. B.G., cut me loose provided it helped the project. It is a rather gracious attitude.



The book-keeping involved were I to deal with NSF directly would entail yearly only two or three types of bills: covers, printing, and drawings.

To whittle down additional expenses I strongly recommend that Book 6, because of previous fascicles already printed, should remain in an edition of 3,000 copies. The remaining books, however, could be reduced to an edition of 1,000. Tremendous savings would result from less covers, less labor in collating, and less printing costs.

A further saving can be made by reducing the present high quality filled paper stock to an inferior grade - my attitude is that this would be penny wise and pound foolish. I guess I could also shop around for a cheaper printer but doubt that such a concern would own the proper fonts such as italics, accents, etc.

I have tried to reduce costs of drawings by old-fashioned barter, namely exchanging for them excess herbarium specimens, or a package containing my Flora Haw., Books 1-5, my "Plants of Haw. Nat. Park" and my "Naturalist's South Pacific Expedition: Fiji." For herbarium specimens sent Munich I received a needed Amaranth drawing too sloppily executed for reproduction. For books, I may get a drawing of Garnotia, as the enclosed letter shows. I fear, however, such savings would be too trivial to consider seriously.

Mrs. Degener and I shall be interested to learn your reaction and to get your suggestions.

Sincerely,

*Flora S. Degener*

July 21, 1961.

Dear Dr. Steere:

I guess you received by this time word from John T. Wilson that the grant B-10617 (Fl. Haw.) was declined and Ralph O'Dette's reaction to the 20% "indirect costs" item.

Remembering your letter in which you suggested the Bishop Museum instead of the Garden sponsor the grant, to cut the Gordian knot and try to salvage something from the wreckage, I quickly wrote that I wanted to sponsor the grant myself as allowed on page 2 of the 1960 NSF instructions booklet. Now let us see what will happen. Any change would be for the better; it can't become any worse.

We did not receive all the NSF mail nor the usual run until our return from botanizing on Molokai, Maui and Hawaii. We had completed our Kohala District work when we heard that Kilauea was erupting. So instead of returning to the city of Hilo via the north shore, we returned via the south, passing the crater. The lava fountain was 250 - 300 ft., high, and when we drove to it on leeward side, our car was pelted with globs of ash and clinkers. We were a bit anxious but because of difficulty in turning we raced the car through the fall. This is truly a "drive-in" volcano, we parking and standing on the rim for the sight. We arrived about 5:30 and stayed until quite late. The difference in daylight and night is of course tremendous.

Having been Naturalist of the Park, this volcanic eruption was nothing new to me, but it was to Isa & to our assistant.

Aloha,

*Gift 2/4/62*

SMITHSONIAN INSTITUTION  
UNITED STATES NATIONAL MUSEUM  
WASHINGTON 25, D. C.

July 25, 1961

Dr. Otto Degener  
Wai'alua, Oahu  
Hawaii

Dear Otto:

From your letter of July 19 I was sorry to learn that the National Science Foundation has decided not to continue its support to you. With the aid of the last one or two grants, you have certainly done some valuable collecting and I hope that this can be continued.

The Smithsonian will certainly be glad to cover the cost of shipment of specimens that you send us. This can either be done by having you make your shipments express collect or by having us reimburse you for parcel post. As to purchasing such material, this would depend upon the quantity and upon our other commitments, but it is quite possible that we can repay you for some of your efforts. At any rate, I should like to discuss this situation with you when I see you in August.

I plan to arrive in Honolulu late on August 18 and to stay at the Waikiki International Hotel. I am looking forward with pleasure to seeing Isa and you again.

With best regards,

Cordially yours,



A. C. Smith  
Director  
Museum of Natural History

NATIONAL SCIENCE FOUNDATION

WASHINGTON 25, D.C.

July 31, 1961

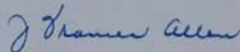
Dr. Otto Degener  
68617 Crozier Drive  
Waialua, Oahu, Hawaii

Dear Dr. Degener:

Your letter of June 19 addressed to Dr. Wilson regarding your recent proposal, B-10617, has been referred to our office for reply. Since Dr. Keck wrote you recently concerning the outcome of this request, I believe no further comments are necessary.

Thank you for sending us reprints of your work appearing in PHYTOLOGIA. As you know, we are glad to have these for our files.

Sincerely,



J Frances Allen  
Associate Program Director  
Systematic Biology



Aug. 5, 1961.

Mrs. Ileen E. Stewart,  
Office of Science Information Service,  
National Science Foundation,  
Washington 25, D.C.

Dear Mrs. Stewart:

Mrs. Degener and I are preparing an application for funds to help in the publication of "Flora Hawaïensis," Books 6 and 7. This proposal would eliminate all field work, most of which is getting to be too strenuous for me.

Could your office retain the twenty copies it received last month of Book 5, and submit them with the twenty copies of our proposal to the examining board at the proper time?

The proposal in the main is embodied in my letter of July 20 to you. Our delay in submitting it involves having the twenty copies mimeographed in Honolulu, a city presently agog because of the Pacific Science Congress.

Sincerely,

NATIONAL SCIENCE FOUNDATION  
WASHINGTON 25, D.C.

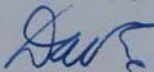
August 7, 1961

Dr. Otto Degener  
Waialua, Oahu, Hawaii

Dear Otto:

Thank you for the August 1 fascicle of "Flora Hawaiiensis."  
We are glad to have this for our files, and look forward to receiving  
any others supported by your grant NSF-G6377. It will not be necessary  
for you to mail Mrs. Stewart fascicles of this sort as I am supplying  
her needs from the supply here.

Sincerely yours,



David D. Keck  
Program Director for  
Systematic Biology

Aug. 8, 1961.

Dear Mr. Countey:

We recently botanized on the Islands of Molokai, Maui and Hawaii. Now that we have the cancelled cheques from the bank, we herewith hand you a mess of receipted bills:

EQUIPMENT

Able Metal Spinning & Stamping Co.	\$ 80.00
King Sporting Goods	86.68
Kerosene, formalin, vials, bags, etc.	52.02
TOTAL FOR EQUIPMENT	<hr/> 218.70

POSTAGE

38.74

INSURANCE FOR ASSISTANT

29.60

TRANSPORTATION

Hawaiian Airlines	115.50
Haleakala Motors	46.78
Sunset U-Drive	95.46
Jack's U-Drive (incl. insurance)	178.50
Miscel. (Airport transportation, excess baggage, jeep)	28.80
TOTAL FOR TRANSPORTATION:	<hr/> 465.04

FOOD & LODGING

Silversword Lodge	52.50
Cunningham Hotel	54.00
Miscel.	179.09
TOTAL FOR FOOD & LODGING	<hr/> 285.59

GRAND TOTAL:

\$ 1,037.67

We have some outstanding bills, such as for printing. These should just about wind up the NSF grant. We received no renewal.

Aloha,



CONSERVATOIRE  
ET  
JARDIN BOTANQUES

ROUTE DE LAUSANNE 192

HERBIERS BOISSIER, DE CANDOLLE  
ET DELESSANT RÉUNIS

DIR.: PROF. DR CHARLES BAEHNI

GENÈVE. August 7, 1961.

Dr. Otto DEGENER  
68-617 Crozier Drive  
W a i a l u a  
Oahu, Hawaii - U.S.A.

Dear Dr. Degener,

We are very thankful for the nice material  
you sent us. You may remember that I, once, offered to buy from  
you the collections you wanted to get rid of. You wawed my offer :  
how about it now ?

With my sincere thanks and my best wishes  
for the continuation of your work, I am, dear Dr. Degener,

Yours faithfully,

for Dr. Charles Baehni

*R. Weibel*

Raymond Weibel  
Head Curator.

*How many herb. specimens do they want for /  
Sophora drawing \$50 cash, we printing "  
sp. as "Aides by N S F & Geneva ---"*

*answered 8/7/61*



Aug. 17, 1961.

Dear Mr. Courney:

Please credit NSF with the sum of \$46.78, which is the amount refunded by Haleakala Motors, thus changing the "Transportation" total in my Aug. 8 letter from \$465.04 to \$418.26.

We are looking forward to the arrival of Dr. & Mrs. Steere - wish the Montagnes had joined them.

Aloha,

Dr. Degener:

In order to pay the loss under this policy it was necessary to endorse your policy for the appropriate coverage.

Bishop Insurance Agency, Ltd.  
August 21, 1961

This endorsement is effective July 5 to 6, 1961 for attachment to Policy No. XF 550766

3



Issued to OTT DEGENER

by ☐ THE EMPLOYERS' LIABILITY ASSURANCE CORPORATION, LIMITED ☒ THE EMPLOYERS' FIRE INSURANCE COMPANY ☐ AMERICAN EMPLOYERS' INSURANCE COMPANY ☐ THE HALIFAX INSURANCE COMPANY OF MASS.

It is agreed that with respect only to such and so many of the following particulars as are indicated by specific entry or entries, the policy is amended to read as follows:

I Insurance is hereby afforded on the following described automobile garaged

at \_\_\_\_\_ (No. and Street) \_\_\_\_\_ (City or Town) \_\_\_\_\_ (County) \_\_\_\_\_ (State)

for such and so many of the coverages as are indicated by entry of additional premium in Paragraph III.

Year of Model	Trade Name	Model	Body Type; Truck Size; Truck Load Capacity; Tank Gallonage Capacity; or Bus Seating Capacity	Identification Number (1) Serial Number (5) Motor Number (M)	Number of Cylinders	Rate Class	Rating Symbol	Actual Cost When Purchased Including Equipment	Purchased Month, Year New or Used
1961	CHEVROLET	BISCAYNE		U-DRIVE	"6"	CL 1	I-1		

II Insurance is hereby terminated on the following described automobile:

Year \_\_\_\_\_ Trade Name and Model \_\_\_\_\_ Motor No. \_\_\_\_\_

for such and so many of the coverages as are indicated by entry of return premium in Paragraph III.

III The limit of the company's liability against each coverage indicated by entry of "additional" or "return" premium is hereby amended to the amount entered opposite each such coverage herein:

LINE SYMBOL	CO. SYM.	ADJUSTMENT OF PREMIUMS			LIMITS OF LIABILITY			COVERAGES
		Added Car Yearly Rates or Premium	Additional Premium	Return Premium	Each Person:	Each Accident:	Each Occurrence:	
X					\$	\$	\$	Bodily Injury Liability Automobile
X					\$			Automobile Medical Payments
X					Each Person:	Each Accident:		PROTECTION AGAINST UNINSURED MOTORIST
XPDL					Each Accident:	Each Occurrence:		Property Damage Liab. Automobile
XPDS		152.00	2.00	-	Actual Cash Value Less \$ Nil Deductible			Collision or Upset
XF&T		18.00	Inc.	-	\$ A.C.V.			Comprehensive** (Excluding Collision)
XF&T					\$			Fire, Lightning and Transportation
XF&T					\$			Theft (Broad Form)
XF&T					\$			Combined Additional Coverage
XF&T					\$ for each disablement			Towing and Labor Costs
TOTAL PREMIUMS		\$ 2.00		\$ -				
NET ADDITIONAL PREMIUM		\$ 2.00 Min.						
		(ADDITIONAL or RETURN)						

\*If coverages are written by more than one company indicate Company Symbol of issuing company: E(ELAC), A(AEIC), F(FEIC), or H(HXIC).

\*\*Includes Personal Effects (\$100 Limit) when written on policy affording Family Automobile Coverage.

IV The automobile is unencumbered unless otherwise stated herein:

ENCUMBRANCE	INSTALLMENT PAYMENTS		FINAL INSTALLMENT	
	NUMBER	AMOUNT OF EACH	DUE DATE	AMOUNT
		\$		\$

Any loss hereunder is payable as interest may appear to the named Insured and (state name and address):

Address of Named Insured is changed to

Rating classification is changed to

Other changes:

8/21/61, Hon., Hawaii

G8219-4 Change of Coverage or Automobile Endorsement  
Printed in U. S. A.

Countersigned Jersey Ray  
(Authorized Representative)

Sept. 7, 1961.

Dear Dave:

It was so nice that we could have had this little "W.I. Bot. Gardeners'" picnic here at Mokuiaia. It is so hard getting our friends to come this distance from Honolulu, and so Iss and I feel especially honored when they do take the trouble to drive out here into the "sticks" of Oahu. The picnic was purely social, as we do not mix pleasure with business.

But now to business: Because of Mr. O'Dette's letter of July 10, protesting "indirect costs of 20%," a cost tacked on by the K.L.B.G., Iss & I have applied as individuals (as allowed on page 6 of the NSF descriptive booklet) for a grant of \$6,000 to finish up Book 6 properly. The grant cost consists of collating, etc., and making the 3,000 covers. That \$6,000 should complete Book 6 so that NSF need not be ashamed of the finished product. If NSF does not approve, the book naturally won't be finished in a year. Nevertheless, with 10 plus years of activity probably remaining in yours truly, Iss & I will undoubtedly complete Book 6 in our lifetimes. It would mean spending about \$500 per year.

After Book 6 is completed, with or without Foundation help, we can then evaluate everything. We can then decide whether the Flora Haw., should and gracefully there until a Degenerian Foundation after our deaths (in case we have no "issue") can take over, or whether we ourselves should struggle on with the project.

We have accepted the Tabrah \$200 a month salary plus travel expenses offer as consultants. We are not counting on this as he may be over-optimistic in his belief his application will be accepted.

When we have completed Book 6 and cleared away our accumulation of herb. specimens, we very likely will apply to NSF for a grant to continue to collect the fast-vanishing Haw. Flora. BUT the lack of interest in our native plants (Except by a handful of Pac. So. Congress members like young ornithologist Warner) makes us wonder if satisfying a mere handful of the population with a Flora is worth the time & personal fortune (not to mention NSF's) we have been putting into it. It is really much more fun for Iss and me to curb ambition (for what?) and just live as happy beach combers. Why was I so crazy for 30 years?



Sept. 7, 1961.

Mrs. Ileen E. Stewart,  
Office of Science Information Service,  
National Science Foundation,  
Washington 25, D.C.

Dear Mrs. Stewart:

First of all I wish to thank you for your patience in waiting for the twenty copies of the application which we finally typed ourselves with insufficient carbon paper out here in the country.

Every one here has been so busy because of the Pacific Science Congress: Mrs. Degener and I conducted about 150 of the biologists for a full-day hike to the summit of this island, donating about that many copies of Flora Hawaiiensis Books 1 - 4 to them. We noted that most of the visitors from warm countries value the Flora because on the pantropic weeds and cultigens described and figured, not at all because of the more interesting Hawaiian endemics!

Because Book 6 is so near completion, Mrs. Degener and I believe a modest request for funds to make it available for distribution may be judged favorably by NSF. If successful in our application, and Book 6 is out of the way, all of us can decide later whether the entire project should terminate or should continue with Book 7.

A bit confused about the future - Mr. O'Dette states the processing of NSF applicants takes approximately 6 months - Mrs. Degener and I have accepted a tentative offer of a position as botanical consultants with salaries. As this work would be for part time only, the remaining time could be devoted to completing Book 6 of the Flora.

Sincerely,

THE ARNOLD ARBORETUM  
HARVARD UNIVERSITY  
JAMAICA PLAIN—CAMBRIDGE—WESTON  
MASSACHUSETTS, U. S. A.



HERBARIUM, LIBRARY AND LABORATORIES  
22 DIVINITY AVENUE  
CAMBRIDGE 38, MASSACHUSETTS

September 27, 1961

Dr. Otto Degener  
Mokuleia Beach, Waialua  
Oahu, Hawaii

Dear Otto:

I returned to Boston to an accumulation of work and cool fall nights, to contrast completely with the leisure of the Pacific Science Congress and the wonderful days in Hawaii. I believe that the Congress was the most profitable and enjoyable one I have ever attended. In no little part, it was the pleasure of meeting so many people and hearing such good papers. May I repeat my admiration for the talk I enjoyed most - your description of the past, present, and future of Hawaii. It was indeed a pleasure to meet Mrs. Degener and to share your company on so many occasions.

I promised to send you the address of the Director of Publications for the AIBS. I would suggest that you write to Dr. Francis C. Harwood, Director of Publications, AIBS, 2000 P Street, N.W., Washington 6, D.C. A letter to him regarding support of publication may bring you the information you need. Do not overlook the possibility, too, of applying to the American Philosophical Society, 104 South Fifth Street, Philadelphia 6, Pennsylvania. I hope you are successful in obtaining support, for I personally would like to see a lot more of the flora of Hawaii published by the Degeners. With my best regards.

Sincerely,

*Rich*

Richard A. Howard  
Director

RAH:kah

Oct. 2, 1961.

Dear Dr. Robbins:

Iss & I are working on Book 6 of our Flora Hawaiianensis and find prices for printing, collating and making of covers simply too expensive for us to handle ourselves. Dick Howard of A.A., suggested we ask the Amer. Philosophical Society for aid, and hence this business letter to you.

For our first NSF grant, sponsored by you, you very graciously handed over to me the entire sum. for our second NSF grant, Dr. Steere for the N.Y. Bot. Garden, charged 15%. This last year we approached NSF a third time. - Book 6 is about 75% completed - and were refused additional help. From Ralph O'Dette's July 12 letter, where he states "Your budget includes indirect costs at 20%," I believe the straw that broke the camel's back was N.Y.'s wish for a one-fifth of the grant for practically nothing but a few hours' book-keeping per year. According to Dave Keck, however, we printed too many weeds and did not spend enough time in the field.

The weeds had been drawn mainly by Park at my own expense 20 - 30 years ago. They were printed as fillers when I lacked drawings of endemic. Anyway, it is the weed description that our schools and institutions in warm countries lap up. Such weeds get my "Plants of the Tropics," never written, out of my system. Regarding field work we did as much as the total cash of about \$5,000 per year allowed, considering my 62 years. Though in the pink of condition, I simply cannot climb to our highest mountains to haul back plant prizes as I used to do 10 and more years ago. Such attempts are followed by nasty nocturnal cramps in my legs.

To finish printing, collating, binding and covering Book 6 to have it equal Book 5 (of which I herewith enclose a copy), I estimate an outlay of about \$5,000 is needed. That would mean an edition of about 3,000.

During the recent Pacific Science Congress, Iss & I had at our place for a picnic the two Steeres, the Kecks, the Dansereaus and several foreign botanists. It was so pleasant, esp. with an ocean swim.

Iss joins me in aloha to Mrs. Robbins and to you,

We still have a back-log of drawings of exotic plants. Should these really be wasted when every Flora of every other region in the World includes introduced as well as native plants?

As you have noted from the above, conditions have changed a bit since I submitted my application to your office. Should the application be successful, I suppose it would be easy enough to modify some details to get everything up to date.

Aloha,



AIBS

AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

HOBART 2-6556

2000 P STREET, N. W.

WASHINGTON 6, D. C.

Dr. Otto Degener  
Waialua  
Oahu, Hawaii

November 1, 1961

Dear Dr. Degener:

This will acknowledge receipt of your letter of October 2nd  
and a copy of Book 5 of FLORA HAWAIIENSIS.

I shall look into the problem you pose and report to you soon.

Sincerely yours,



Francis C. Harwood  
Director of Publications

FCH: mh

THE ROCKEFELLER INSTITUTE

A Graduate University and Research Center

NEW YORK 21, NEW YORK

November, 1, 1961

Dear Otto

You have heard from Dr. Corner the long held policy of the APS on publication. I think you can understand that since the Society's interest covers all fields of knowledge and it has its own publication program to support, a policy of this nature is necessary.

I assume you have presented your problem to Dr. Steere. His advice and help would be most important. Kindest regards and best wishes to Isa and to you

Sincerely  
William F. Robb

NATIONAL SCIENCE FOUNDATION  
WASHINGTON 25, D.C.

Office of Science Information Service

November 7, 1961

VIA AIR MAIL

Dr. Otto Degener  
Mokuleia Beach  
Oahu, Hawaii

Dear Dr. Degener:

This is to acknowledge receipt of your letter of September 7, 1961, and of your formal proposal requesting NSF support for completion of publication of Flora Hawaiiensis, Book 6.

I must apologize for the long delay that has occurred in answering your several earlier letters. A number of staff changes and some recent illness handicapped our flow of correspondence.

Nineteen copies of Volume 5 were received in July and will be sent to reviewers as samples of the Flora. I think it is much more suitable to consider only Volume 6 at this time and to defer any decision on later volumes. We will attempt to have your proposal reviewed as promptly as possible, but I must repeat that, because of the tremendous volume we are currently receiving, processing is taking from four to six months.

I believe mention should be made at this time, of the recovery clause that is normally attached to monograph grants. The clause states that income from sales, over and above the amount invested by the publisher (in this case, you as publisher and author), up to the amount of the grant, for a period of three years, will be returned to the Foundation.

Dr. Otto Degener

-2-

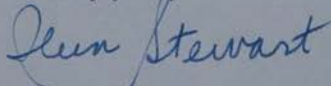
November 7, 1961

We feel that this clause guarantees maximum use of public funds by returning profits to the Foundation for re-use.

We would appreciate receiving from you a brief letter stating your acceptance of this clause, should a grant be made for support of your proposal.

If any questions arise during the course of the reviewing procedure, I will contact you again.

Sincerely yours,

A handwritten signature in blue ink that reads "Ileen Stewart". The signature is written in a cursive, flowing style.

Ileen E. Stewart  
Assistant Program Director  
Support of Scientific Publications



Nov. 12, 1961.

Mrs. Ilcen E. Stewart,  
Office of Science Information Service,  
National Science Foundation,  
Washington 25, D.C.

Dear Mrs. Stewart:

Thank you for your letter of Nov. 7. Mrs. Degener and I agree with you that Book 6 should be considered a project of its own.

Uncertain about future funds, we dropped further botanical exploration in the Islands. Instead, we are using the remaining cash left in our present NSF grant chiefly as partial payment for 2,500 Book 6 covers. As these are rather expensive, we thought 500 books of the 3,000 edition might be sold unbound to local students for a trivial sum. In spite of this reduction in cost, we will absorb most of the expense ourselves as we shall complete payment long before NSF could come to our "rescue."

As Book 6 probably will be our swan song because of ever-increasing publication costs, we plan to have it a full 500 pages. The covers are being made now by The S.K. Smith Company of Los Angeles large enough to meet this need.

From rumors we get from Washingtonians, my past application for funds for further exploratory work failed because the twenty reviewers studied my past printing of *Flora Hawaiiensis* pages. They believe the approximately \$25,000 NSF cash expended over almost six years was used for this one effort. I believe they never reviewed the auditor's figures as to how much the printing and the making of drawings actually cost. I hope your office, more conversant in these matters, will check the number of pages of text and illustrations in Book 5 and unfinished Book 6 to learn how really economically Mrs. Degener and I handled the printing end of the project.

We spent a small fortune in exploratory work on the "outside" islands, which can be reached only by plane. We spent a huge sum in postage, shipping our catch of plants home by mail, shipping herbarium and living specimens to monographers for their researches, and shipping duplicate specimens as gifts to about 40 different scientific institutions throughout the World. The examiners of course could not know that we have a large back-log of plant material awaiting our study; that Dr. Sherff has a ms., awaiting publication by the Bishop Museum in which we jointly are describing new taxa; that the late Dr. Wimmer, shortly before

his death May 2, submitted his monograph of the Lobelioideae (describing many of our finds) to a publisher in Berlin; that we materially aided Dr. Carl Skottsberg in his monographic study of the local species of Vikstroemia; and that we helped many other specialists with material for their researches as their papers will later indicate.

The examiners were evidently displeased that Mrs. Degener and I published illustrated descriptions of some pantropic weeds over the caption "Aided by National Science Foundation." Yet they never realized that this aid involved printing costs only. Most of these illustrations had been made 20 - 30 years ago at our own expense. Nor could they have known - a surprise to Mrs. Degener and me - that when we donated \$1,753 worth of our books to the recent Pacific Science Congress, the botanists from the Far East unlike those from America and Europe, valued the books for the pantropic plants shown rather than for the native plants which of course are strange to their own countries.

As Mrs. Degener and I (childless and getting on in years) are only interested in the sale of books to help our project in furthering the Science of Botany by producing a local Flora, we definitely agree to abide by the clause stating "that income from sales, over and above the amount invested by the publisher (namely myself), up to the amount of the grant, for a period of three years, will be returned to the Foundation."

Should our application be successful, please then clarify how the Foundation would classify the copies we give away. There are few Foreign or Mainland botanists that do not contact us when passing through our Islands. Whether we invite them for a picnic lunch and drive them up into our rain-forest or not for sight-seeing, we usually send them on their way with complimentary copies of the Flora. Furthermore, due to lack of library and herbarium facilities in the Islands, we constantly beg Mainland institutions for photostats, bibliographic and other aid. We seldom pay cash for their many kindnesses, but reciprocate by mailing them complimentary copies of our books. Would I owe the Foundation the value of such books, known to the recipient as a product of NSF generosity? In such cases, the giving of gifts would be prohibitive for us.

Should we fly, for example, to Molokai to solve whether the Sophora growing there is the same as the one growing here on Oahu, is such an expense considered part of the publisher's investment?



## STATEMENT

THE S. K. SMITH COMPANY

5260 WEST 104TH STREET • LOS ANGELES 45  
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Attn: Dr. Otto Degener  
Waiialua, Hawaii

NOV 30 1961

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DR. OTTO DEGENER  
68-617 CROZIER DRIVE  
WAIKALUA, OAHU

DATE **JANUARY 12, 1962**

DUE TO ARRIVE **JAN. 18.**

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THE ABOVE ITEMS REPRESENT PRINCIPALLY CASH PAID OUT FOR YOUR ACCOUNT AND ACCORDING TO I.C.C. REGULATIONS ARE DUE AND PAYABLE WITHIN SEVEN (7) DAYS.  
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INVOICE DATE 11-30-61

SHIPPED  
TO:Dr. Otto Degener  
60-617 Crozier Drive  
Wailua, Oahu, Hawaii

DATE SHIPPED

VIA

CUSTOMER'S NO.	Ltd. 10-21-61	NO.	CLA-287D	SALESMAN		
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2525	"FLORA HAWAIIENSIS - BOOK 6"					
	SMITHCRAFTED stiff, turned-case, two-piece covers,			\$.62 ea.	\$1565.50	\$1565.50
	Advance payment					775.00
						<u>\$790.50</u>
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## IMPORTANT NOTICE

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The following is copied from NSF Form 4-51  
Nov. 1961

NSF FORM  
DEC 1963 6-1

Form Approved  
Budget Bureau No. 99-R013.1

NATIONAL SCIENCE FOUNDATION

GRANT FISCAL REPORT

Final Oct. 15, '63 - Feb. 15, '64

From: Dr. Otto Degener (Grantee) 021 IND  
Waialua, Oahu, Hawaii (Address)

To: Grants Office  
NATIONAL SCIENCE FOUNDATION  
Washington, D.C. 20550

Date: \_\_\_\_\_

Report of obligations from NSF funds for grant number: G.B-877

(NSF No.)

Reporting period: \_\_\_\_\_ to \_\_\_\_\_ (inclusive)  
(Date) (Date)

Type report: Interim ☐ , Number \_\_\_\_\_; final ☐ (check one)

Item	Amount Expended
1. Salaries and wages . . . . .	\$ _____
2. Equipment (permanent) . . . . .	_____
3. Supplies, materials, and expendable equipment . . . . .	_____
4. Travel . . . . .	_____
5. Publication costs (Total - page costs, reprints, direct labor, etc.) . . . . .	_____
(a) Page costs only, if available . . . . .	_____
(b) Reprints, direct labor, and any other publication costs . . . . .	_____
6. Other (Specify): _____	_____
7. Total direct costs - Add lines 1 through 6 . . . . .	_____
8. Allowance for indirect costs - _____ % of line 7 . . . . .	_____
9. Total obligations for above period - Add lines 7 & 8 . . . . .	_____
10. Total obligations for prior periods . . . . .	_____
11. Total obligations to date - Add lines 9 & 10 . . . . .	_____

COMMENTS: (Continue on reverse side if necessary)

Amount of award \$2,000 Expended end of previous quarter 1,562.37 Expended this quarter \$439.95 Total Expended 2,002.32 Unexpended balance None  
and more to come

SIGNED: Dr. Otto Degener  
TYPE NAME: \_\_\_\_\_

TITLE: Grantee

Two copies of an interim fiscal report are due approximately six months from award date of a grant and at six-month intervals thereafter. Firm outstanding commitments should be considered as obligations for the purposes of interim reports. Two copies of a final fiscal report are due as soon as possible after all costs chargeable to the grant are known. The following certification, in the case of final reports, should be inserted above, immediately preceding the signature of the official authorized to sign for the grantee institution: "I certify that this final fiscal report is correct and that the expenditures included herein are deemed properly chargeable to the grant." Unused funds are to be returned by check payable to the National Science Foundation.



THE S. K. SMITH COMPANY

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FLORA HAWAIIENSIS - BOOK 6

December 26, 1961

AIRMAIL

Dr. Otto Degener  
Hale Degener  
68-617 Crozier Drive  
Waialua, Oahu, Hawaii

Dr. Degener; your FLORA HAWAIIENSIS covers are completed and ready for shipment. Our invoice was mailed to you on November 30, 1961. As soon as we receive your check for the balance due, we will ship the completed covers to you.

THE S. K. SMITH COMPANY

*John Bugel*  
Service Manager

John Bugel:ks



Dec. 27, 1961.

Dear Dave:

As a "byproduct" of NSF cash for collecting, I wrote a brief Sesuvola paper, of which I herewith enclose four copies to be added to my files. Isa & I paid for the reprints ourselves, taking off the modest cost as a business expense from our taxes.

It is too bad for Haw. Botany that the NSF examiners evidently never fully realized how much we actually collected during the last 5 - 6 years, and how only years later will the result of such explorations find their way into the bot. literature. Well, anyway, about 40 institutions throughout the World are getting duplicate material thanks to NSF generosity.

Isa and I are trying to wind up our NSF accounting by Jan. 1 but we just can't get Countey of the Garden to process our receipted bills fast enough. Of course, we can't expect him to reply to us by return mail.

We both had a little siege of the flu which I apparently first picked up at the local hospital when I there had the Pacific Ocean and some fungus cleaned out of one ear. We are again fully alive & kicking and piling up ms., for the local printer.

Isa & I wish you and Mrs. Keck a Happy New Year.

Aloha,