Francisco E. Baisas (1896-1973)

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With the death of Francisco E. Baisas on May 24, 1973, an end came to an era which saw the elucidation of the malaria vectors of the Philippines and great progress made in the control of a disease which had accounted for as many as 2,000,000 cases annually in those islands.

Baisas was born June 4, 1896 in Luzon where he was raised through boyhood, graduating as valedictorian in 1922 from the Laguna High School. In that same year, wanting to be a journalist, he enrolled in the College of Liberal Arts of the University of the Philippines.

Just as Baisas was getting down to serious study at the University of the Philippines, an American Sanitary engineer with the International Health Division of the Rockefeller Foundation was looking for an able man with "ideas, imagination and courage" who could be trained as a malaria technician. Baisas was recommended to him by the division superintendent of schools for Laguna and was subsequently selected for the position.

Baisas was the first Filipino to be trained as a malaria technician by the Foundation. His progress was so excellent that in only six months he was promoted to the position of field director. In 1926, four years after the activation of the Rockefeller Foundation in the Philippines, Baisas was promoted to entomologist-supervisor.

In 1928, the malaria control section set up a portable field laboratory at Tunkong Manga, San Jose del Monte, Bulacan. This remained the nerve center for malaria research in the Philippines until the Institute of Malariology was established in 1938 by the Bureau of Health on the Tala estate.

Meanwhile, in 1929 Baisas passed the government examination for malaria technicians with a rating of 93.55%. In 1930, he passed the government examination for malaria entomologists with thesis with a rating of 92.50%. Subsequently, he enrolled again at the University of the Philippines and by going to class at night finished in 1934 his A.B. with a major in Zoology and B.S. in Entomology with meritorius grades.

After the reentry of the U. S. Army into the Philippines near the end of World War II, Baisas was employed as an entomologist by the 3rd General Medical Laboratory. Later, he rejoined the control section of the Institute of Malariology with the designation of associate malariologist. In 1955, Baisas was cited by the Philippine Government as one of the ten outstanding scientists in the country and was awarded a gold medal and Diploma of Honor for his contributions to the study of malaria and mosquitoes in the Philippines.

All of the eight children of Francisco and Crispina Calingo-Baisas have developed careers in medicine, dentistry, pharmacy and science. Several of them presently reside in the United States.

Although Baisas retired from government service in 1961 at the age of 65, he continued for the next seven years to involve himself in work with mosquitoes. This culminated in 1967-68 with a study on mosquitoes for the U. S. Air Force.

In 1970, the Baisas's came to the United States to reside with some of their children. Mrs. Calingo-Baisas died here on June 12, 1971. After her demise, his health declined rapidly and, following a brief illness, he died on May 24, 1973.

During his working lifetime, Francisco Baisas published a long list of papers (see below) and described 71 new species of mosquitoes. He was an outstanding man and scientist who did much to improve our knowledge of the mosquito fauna of the Philippines.

We are indebted to a daughter, Mrs. Victoria Baisas-Salceda, and to a son, Dr. D. C. Baisas, for the information given above.

BIBLIOGRAPHY

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Baisas, F. E.

- 1927. Preliminary differential characteristics of Philippine anopheline mosquito larvae. Mon. Bull. Phil. Hlth. Serv. 7(6):267-280, illus.
- 1931. Morphology of some Philippine Anopheles. Revta Filipina de Medicina y Farmacia 22:189-196, illus.
- ____. The barbirostris-hyrcanus group of the Philippine Anopheles. Phil. J. Sci. 44:425-448, 3 pls.
- 1932. The morphology of some Philippine Anopheles. Trans. 8th Congr. Far East Assoc. trop. Med. 252-257.
- Russell, P. F. and F. E. Baisas 1934. Habitats of Philippine Anopheles larvae. Phil. J. Sci. 55:297-303, 4 pls.
- ____. A practical illustrated key to larvae of Philippine Anopheles. Phil. J. Sci. 55:307-336, 33 pls.

1935. The technic of handling mosquitoes. Phil. J. Sci. 56:257-294, 8 pls.

Baisas, F. E.

- 1935. Notes on Philippine mosquitoes, I. The Armigeres group. Phil. J. Sci. 56:485-497, 4 pls.
- ____. Notes on Philippine mosquitoes, II. Uranotaenia group. Phil. J. Sci. 57:63-80, 4 pls.
- Notes on Philippine mosquitoes, V. The pupal characteristics of anophelines under the *Myzorhynchus* series and group *Neocellia*, with further comments on the larvae and adults of *sinensis*. Mon. Bull. Phil. Bur. Hlth. 15(9):291-339, 23 pls.
- Russell, P. F. and F. E. Baisas 1936. A practical illustrated key to adults of Philippine Anopheles. Phil. J. Sci. 59:15-64, 34 pls.

Baisas, F. E. and S. M. K. Hu

Anopheles hyrcanus var. sinensis of the Philippines and certain parts of China, with some comments on Anopheles hyrcanus nigerrimus of the Philippines. Mon. Bull. Phil. Bur. Hlth. 16(1):205-242, 7 pls.

Baisas, F. E. _____. Notes on Philippine mosquitoes, IV. The pupal and certain adult characters of some rare species of *Anopheles*. Phil. J. Sci. 59:65-84, 15 pls.

King, W. V. and F. E. Baisas _____. A new species and a new variety of Philippine Anopheles related to Anopheles leucosphyrus Dönitz. Proc. ent. Soc. Wash. 38:79-89, illus.

Baisas, F. E.

- 1938. Notes on Philippine mosquitoes, VII. *Culex* with banded proboscis and tarsi. *Anopheles:* the pupae of three rare species, the *leucosphyrus* subgroup. Mon. Bull. Phil. Bur. Hlth. 18(1):175-232, 18 pls.
- 1946. Notes on Philippine mosquitoes, VIII. Species found in the jungles of Llavac. Mon. Bull. Phil. Bur. Hlth. 22(1):27-49, illus.
- Mon. Bull. Phil. Bur. Hlth. 22(2):27-35, illus.

76

Baisas, F. E.

- 1947. Notes on Philippine mosquitoes—XI. A new species of *Tripteroides*. Fieldiana - Zoology 31(15):121-124, illus.
- _____. Notes on Philippine mosquitoes, XIV. The larval instars of Anopheles. Mon. Bull. Phil. Bur. Hlth. 23(3):197-207, illus.

Baisas, F. E. and A. U. Pagayon 1949. Notes on Philippine mosquitoes, XV. The chaetotaxy of the pupae and larvae of *Tripteroides*. Phil. J. Sci. 78:43-72, 4 pls.

- Baisas, F. E., A. U. Pagayon, B. Crisostomo and F. Digma 1950. Malaria inquiry in Baguio and vicinity (August, 1946). Mon. Bull. Phil. Bur. Hlth. 26(2):43-61.
- Baisas, F. E. and A. U. Pagayon 1952. Notes on Philippine mosquitoes, XVI. Genus Tripteroides. Inst. Sci. Tech. 198 pp., 23 pls. Manila.

Baisas, F. E. and P. Feliciano

1953. Notes on Philippine mosquitoes, XIII. Four new species of Zeugnomyia and Topomyia. Fieldiana: Zoology 33(3):161-179, illus.

Baisas, F. E. and A. U. Pagayon

1956. Notes on Philippine mosquitoes, XVII. The eggs and first-instar larvae of some Neomyzomyias. Phil. J. Sci. 85:215-227, 3 pls.

Baisas, F. E.

- *1957. Notes on Philippine mosquitoes, XVIII. The malaria vector, flavirostris: Summary of recent findings. [Mon. Bull. Phil. Dept. Hlth. Sept. 14, 1956, ms. 25 pp. 1 map. (submitted for publication)].
- 1958. Notes on Philippine mosquitoes, XIX. The mosquito problem in the control of filariasis in Sorsogon province. Phil. J. Sci. 86:71-120.

Baisas, F. E. and R. Catipon Notes on Philippine mosquitoes, XX. Daytime observations in houses of two barrios in Laguna province. Phil. J. Sci. 87:47-63.

Baisas, F. E., L. F. L. Bañez, and N. Leuenberger 1960. Notes on Philippine mosquitoes, XXII. The axil-breeding species. Phil. J. Sci. 89:183-199.

Baisas, F. E., and F. H. Dowell

1967. Keys to the adult female and larval anopheline mosquitoes of the Philippines. J. med. Ent. 4:11-24, illus.

^{*} Baisas referenced this twice in later articles but we have been unable to verify its existence.