

## OBITUARY.

ALBERT KOEBELE.

(Presented at the meeting of March 5, 1925.)

*Whereas*, The Hawaiian Entomological Society has learned with deep regret of the death on December 28, 1924, of Mr. Albert Koebele, an honorary member of the society since its organization in 1904; be it therefore

*Resolved*, That the society hereby place on record its high appreciation of his notable work as pioneer in Economic Entomology in Hawaii, and the invaluable services he has rendered in the discovery and introduction of natural enemies to many of the destructive insect pests of the gardens and crops of this country; be it further

*Resolved*, That this resolution be spread on the minutes of the society together with the accompanying biographical sketch, and that a copy be transmitted with the sympathy of the society to the bereaved widow, and a copy be also sent to the trustees of the Hawaiian Sugar Planters' Association.

OTTO H. SWEZEY

W. M. GIFFARD

FREDK. MUIR

Committee.

## BIOGRAPHICAL SKETCH.

Mr. Albert Koebele was one of the first, if not the very first entomologist, to engage in the introduction of natural enemies as a method of combating insect pests. His early work in this line was in California, where he introduced from Australia in 1888-9 the lady beetle *Novius cardinalis* as an enemy to the cottony cushion scale, *Icerya purchasi*, a serious citrus pest. This was a remarkable success, and was considered to have saved the citrus industry from ruin. His work in Hawaii commenced in 1893. Between that date and 1900 he traveled extensively in search of beneficial insects for introduction to Hawaii, visiting Australia, Fiji, Japan, China, Ceylon, Mexico, and California. Many valuable lady beetles were secured, as well as parasites for scale insects and other pests. Many of these introductions were successful, and some of the fruit and garden pests were brought into subjection.

In 1902 the lantana insects were introduced from Mexico. There were eight species of these which became established and are effective, each in its own way, in checking seed production in lantana. In 1904, with Doctor Perkins, the enemies of the sugarcane leafhopper were studied in Australia and the egg-parasite introduced, which greatly checked the leafhopper pest and enormously lessened the annual loss from the cane leafhopper. 1905 to 1907 were spent in Fiji, California, Arizona, and Mexico, studying sugar-cane insects and their parasites, enemies of horn-fly, and miscellaneous pests. A number of minor introductions were made. 1908 to 1910 were spent in Germany, giving a chance for recovery of his health, which had been impaired by so much time spent in exploration and research work in fever-infested regions of the tropics. At the same time he studied enemies of horn-fly, and sent over much material, but little if any success was attained by this.

During the earlier part of the time in Hawaii, Mr. Koebele was employed by the Territory; but the latter part he was on the entomological staff of the Experiment Station, Hawaiian Sugar Planters' Association. In 1910, on account of his failing health, he was relieved from active duty, but retained as Consulting Entomologist. He continued in Germany and was there



ALBERT KOEBELE

Enlargement from a snapshot taken in a Honolulu garden  
about 1900. (Courtesy of W. M. Giffard.)

during the Great War, on account of which he was reduced to very meager circumstances, and both he and his wife suffered great hardships. At the close of the war, as soon as it was learned of their circumstances, attempts were made by the Hawaiian Sugar Planters' Association to arrange for their return to their former home in Alameda, California, but by the time all arrangements were completed he had become too feeble for undertaking such a trip.

Mr. Koebele's death occurred December 28, 1924, in Germany where he went a few years before the Great War, and was engaged for a time in studying dipterous parasites, a number of which were sent to Honolulu in the hope that they might become established and be of some assistance against the horn-fly.

The services rendered by Mr. Koebele and the benefits derived by the agricultural and horticultural interests of Hawaii by his introduction of beneficial insects cannot be estimated in dollars and cents. He made the beginning in this line of work, and much of the time was working alone, yet seventeen species of lady beetles were successfully introduced by him and have become valuable factors in keeping reduced such pests as scale insects, mealybugs, plant lice and leaf mites. At least six other lady beetles were introduced and became established, but after a few years disappeared. The eight lantana insects were introduced by him, and about the same number of miscellaneous parasites of Diptera and Lepidoptera, etc. Following Mr. Koebele in this line of work, the other entomologists have introduced a larger number of beneficial insects, and some of them have produced more spectacular and valuable results, but this should not in any way lessen the credit to be given to him who was the pioneer in Hawaii in this important branch of entomological work.