Exploits of Some Famous Entomologists of the Hawaiian Entomological Society

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Many influential entomologists have been members of the Hawaiian Entomological Society, and of these, many experienced remarkable adventures as exploration entomologists in many parts of the world. This paper briefly details a few somewhat amusing adventures of some of the famous entomologists of the society in the early years.

Among the reports of the Hawaiian Sugar Planters' Experiment Station, there lies more romantic adventure than in a pirate's autobiography. For instance, there is the wonderful story of Frederick A.G. Muir, Assistant Entomologist of the Station (Fig. 1). He was, at the time, a Fellow of the Royal Entomological Society of London who would later be awarded an honorary Ph.D. from the University of Hawaii. He was sent out to discover a parasite or parasitoid for the sugarcane borer [*Rhabdocelus obscurus* (Boisduval)], a weevil which tunnels into sugarcane stalks. Very little was known about this particular insect at the time, so Muir had to do what traveling naturalists did in those early days of the late 19th century. He had to search in places he knew sugarcane was grown and ask advice from knowledgeable persons. This included travel to places like China, Indonesia, Papua New Guinea and Australia. He set out for China in the summer of 1906, first going to Hong Kong and then to Macao, to meet a man who would later help him succeed with the project.

John C. Kershaw had been living in China for several years and had written an excellent book on the butterflies of Hong Kong and Macao. They traveled together up the Pearl River from Macao to Guangzhou (then Canton) then west to a forested area known as How-lik (now known as the Dinghushan Biosphere Forest Reserve) in Guangdong Province. There, monks lived in a Buddhist monastery and protected the forest and wildlife from wood-cutters (Muir, 1907). They failed to find the weevil or its parasite here, so Muir had to wander thousands of miles in what was then the Dutch East Indies in the most lawless corners of the Far East. He was in continual danger of wild beasts, savage natives and poisonous snakes, venturing where other men had not dared to go. Usually he had the help of only a local guide who was not particularly trained in entomology. He was laid low with fever, shot at…all to find an insect about the size of the common house fly, a tachinid fly by the name *Lixophaga spenophori* (Villeneuve). Muir also traveled through the Lo-fou mountains in Guangdong Province in a region reported to be fanatically hostile toward foreigners. Muir pretended to be a medical doctor searching for medicinal herbs, and was treated with the greatest respect.

In January of 1907, having failed to find a parasite or the weevil, Muir sailed south, continuing in vain his search through the Malay states, and wandering in the wild spots of Java and Borneo until the autumn. Thence he proceeded to the Moluccas (Indonesia) working in small, native cane fields, sometimes knee-deep in pestilential mud, tormented by mosquitoes, sleeping in foul, native huts and often wet for days on end because of torrential rains. Then, quite unexpectedly, he found a borer-beetle, not in sugar cane but in sago-palm. The beetle resembled the Hawaiian cane borer and had a parasite. So in September 1908, Muir started for Honolulu by way of Hong Kong with a great number of parasites and borers. Reaching Hong Kong, he found that all of his insects had died. So in the fall of 1908, he returned to search for the authentic cane borer. Unsuccessful once more, he moved on to Papua New

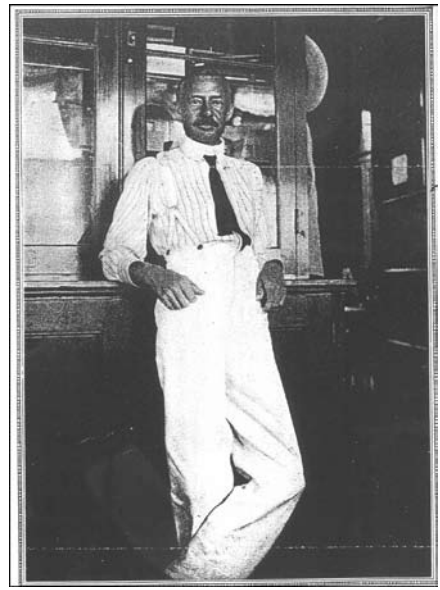

Figure 1. Frederick Muir, a scientist who was sent to search the earth for a parasite to destroy a weevil pest of Hawaiian sugarcane.

Guinea, and in the spring of the following year, his search was rewarded (Muir, 1910).

Full of hope, he started home with a number of cages of growing cane containing beetles and parasitic tachinid flies, this time by way of Brisbane, Australia. Steamer schedules were uncertain in that part of the world. Muir missed connections, went through a thousand annoying delays, fell ill with typhoid fever and lay flat on his back in an Australian hospital for five weeks. In the meantime, his parasites had hatched out and died. But Muir never gave up. Realizing that the parasites would not survive a direct journey to Honolulu, he contacted his friend John Kershaw in Macao to help him arrange intermediate breeding stations or depots along the way. In February he was back in Papua New Guinea, but still weak with fever. Leaving in April with another colony of insects, he fell ill again, but saved his precious cargo. Kershaw set up a depot or station in a sugar mill in the northeastern Australian town of Mossman (Queensland) and bred the weevils and their parasites (Anon 1910). Muir then, with another generation of the parasites, sailed to Fiji and bred another generation. And so, crawling slowly up the Pacific coast, delayed by insuperable obstacles, and still far from well, Muir finally reached Honolulu in August of 1910.

Reading of the exploits of Muir is like reading an adventure novel. On the island of Ceram (Indonesia), Dutch soldiers were at war with the native peoples. It was savage, barbaric warfare marked by tortures and other Malaysian atrocities. Muir wanted to investigate sugar fields in the interior, but was forbidden to go there by the authorities. In Amboina, a spitting cobra almost destroyed his eyesight. In Papua New Guinea he had to swim rivers infested with crocodiles. More than once his travels took him to places that might have meant death for the average man. Yet he downplayed the danger of his travels. In a magazine article published in 1912, a newspaper man asked Mr. Muir, "Were you ever in danger of losing your life?" Muir was a small, mild-looking man with the air of a college professor, in spite of the outdoor color on his face and hands. He seemed much embarrassed by the question. "Oh, no," he said with a sharp English accent that ten years knocking about in the tropics

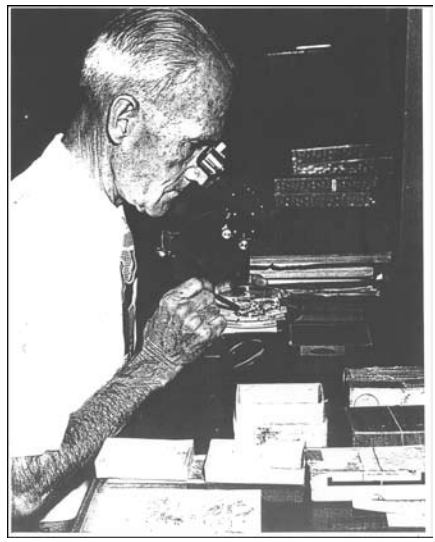

Figure 2. Cyril E. Pemberton, Station entomologist, identifying insects caught in a light trap.

had not altered. "You see, I have a theory that a man can go anywhere safely as long as he respects the point of view of the inhabitants, whether they be man or animals."

Elwood Curtin Zimmerman (1912–2004) and Cyril E. Pemberton (1886–1975, Fig. 2) were also famous colleagues whose careers were influenced by the Hawaiian Sugar Planters' Association. In 1934, Zimmerman interrupted his studies at UC Berkeley to participate as an entomologist on a collecting expedition to French Polynesia sponsored by the Bishop Museum. He graduated with a B.S. degree from UC Berkeley in 1936. At Berkeley, he was known as "Zimmie," a nick-name which stuck. It was in mid-1936, soon after gaining a permanent position with the Bishop Museum, that he established his plan to monograph the entire insect fauna of Hawaii. By the end of WWII, Zimmerman had completed five volumes of the work, but the Museum had begun to emphasize anthropology over entomology, and Zimmerman's publications were bumped down the publication queue. So after years of frustration, Zimmerman sought the help of Gregg Sinclair, President of the University of Hawaii, and Harold Lyon, who was Director of Hawaiian Sugar Planters' Experiment Station. The two organizations agreed to co-sponsor the works for publication by the newly organized University of Hawaii Press. Over the next 25+ years, Zimmerman worked feverishly on his project, sharing time between the Bishop Musuem in Honolulu and the British Museum in London. In 1972, however, at the age of 60 and after financial support for this project was exhausted, Zimmerman put aside this work to take on another monumental task: describing and cataloging the weevil fauna of Australia. By the time Zimmerman passed away in the summer of 2004, he had completed five of the seven planned volumes of the *Australian Weevils* monographs. For his work on Hawaiian insects, "Zimmie" received the Regents medal for distinction from the University of Hawaii in 1998, along with Dr. Elmo Hardy, who had written the volumes on flies. To Zimmerman's regret, had been unable to finish the *Insects of Hawaii* monographs, which lacked volumes on beetles, wasps and fleas.

There is a story involving both Zimmerman and Pemberton while the two were staying at an inn on the island of Kauai in August of 1952 (Fern, 1952). An elderly male guest at Kauai

Inn was awakened about midnight by a feminine voice in the hallway of his cottage crying, "Is there a man in this cottage? Please, is there a man in this cottage?" After considering his 66 years of age for a moment, Pemberton answered through the door that, indeed there was, and he asked what he could do. When Pemberton opened the door a young lady was standing in the hallway wildly excited and completely distraught. "There is a huge animal in my room," she exclaimed. She indicated with her hands something the length of a good-sized cat or a dog. "Will you remove it, please?" Our hero evidently had some experience with distraught women under similar circumstances. He reached into a small bag that he carried with him professionally and took out a glass container. He then offered to capture the animal. He was told that it was actually in the cottage next door. Our hero made the trip to the cottage in his pajamas with the young lady following, entered the room, looked under the bed and with his container quickly captured a cockroach slightly larger than ordinary size. The young lady witnessed with wide-eyed admiration the efficient manner in which he captured the animal. Then noting that the container was perfectly suited for trapping it, she remarked, "Why, you must be a professional exterminator!" "Well, I guess I am," the elderly guest answered. "But I am really in the wholesale end." He did not go on to say that he was Dr. Cyril E. Pemberton, head of the entomology department at the Hawaiian Sugar Planters' Association.

He looked forward to getting the 3rd degree the next morning by those who saw him proceeding in his pajamas from his cottage to the other in the company of a young lady. He hoped to be nonchalant about the whole affair. Apparently there were no witnesses and his reputation remained intact, which he considered worse luck.

Dr. Pemberton's associate, E.C. Zimmerman, was not so certain that the incident went un-witnessed. He and Dr. Pemberton were sitting in front of their cottage waiting for the time to board their plane. It was a hot day, and while they were sitting there enjoying the shade, a "wahine" staff member of the inn passed by. Pemberton remarked on the heat and added that he and Mr. Zimmerman could use cooling refreshment. She remarked that there was plenty of cooling refreshment at the bar. Dr. Pemberton replied that would require a walk to the bar and payment for it, neither of which they were in a mood to do. They thought no more of the incident until a short time later when the Inn's staff member returned with two bottles of cold beer and there was no check. Mr. Zimmerman believed this incident was prima facie evidence that Dr. Pemberton's adventure of the night before did get about.

Acknowledgement

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