Japanese Beloved Luminous Organisms

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Abstract

In the legend of the opening remark for the 1st Conference on Luminescence at Asilomar in 1952, Newton Harvey mentioned that "Japan is like a treasure box of luminous organisms" [1]. Harvey visited Japan in 1916, with his bride, and then again in 1917 to study on the ostracod Vargula hilgendorfii and the firefly-squid Watasenia scintillans. - Japan is rich in luminous organisms. Japanese people have felt familiar with luminous organisms, especially fireflies. The aquatic fireflies Luciola cruciata and Luciola lateralis have been frequently depicted as essential items in a number of Japanese traditional "Haiku" versicles and drawn in "Ukiyo-e" woodblocks. Also, we must not forget two pioneers of Japanese bioluminescence study, Drs. Sakyo Kanda (1874-1939) and Yata Haneda (1907-1995), who explored Japanese luminous organisms exhaustively and published great books [1,2].

I have published several introductory books of luminous organisms in Japanese (e.g. [3,4]) to share their beauty, wonder and scientifically interest with young people, in collaboration with professional photographers. In this talk, I would introduce our educational activities for luminous organisms in Japan, especially about the experiential learning at elementary schools and high schools using the luminous earthworm *Microscolex phosphoreus*, which recently comes to light to be very abundant everywhere in Japan.

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