

Bacterial symbionts in the luminous organ of the squid, *Loligo duvauceli*, and cuttlefish, *Sepia* sp.

Delianis Pringgenies, Soelaksono Sastrodihardjo, Noorsalam Rahman Nganro & I Nyoman Aryantha



Pringgenies, D., S. Sastrodihardjo, N. R. Nganro & I. N. Aryantha. 2001. Bacterial symbionts in the luminous organ of the squid, *Loligo duvauceli*, and cuttlefish, *Sepia* sp. - Phuket Marine Biological Center Special Publication 25(1): 145-148.

The luminous organs of the squid *L. duvauceli* and cuttlefish *Sepia* sp. are located on the ventral surface of the ink sac near of the anus. The organs consist of a lens, the luminous sac, reflector tissue, and the ink layer covering the reflector. The bacteria, *Photobacterium phosphoreum*, appear in pockets of the luminous sac. Bacteria from *Loligo duvauceli* have a bright blue luminescence, while bacteria from the cuttlefish *Sepia* sp. have a yellow luminescence.

Symbiont bacteria only were found in squid after they had hatched, indicating that they came from free living bacteria in the water. They were not transferred via the egg.

Delianis Pringgenies. Marine Science Dept, Diponegoro University - Semarang, Indonesia.

Soelaksono Sastrodihardjo, Noorsalam Rahman Nganro & I Nyoman Aryantha
Life Science Dept, Institute Technology Bandung - Bandung, Indonesia.

E-mail Delianis Pringgenies: pringgenies@yahoo.com