Asexual reproduction, by fission, of *Stichopus horrens* Selenka in its natural habitat was observed in Okinawa, Japan during December 2004. Some of the tropical sea cucumber species that reproduce by fission are also known in Japan (Emson and Wilkie 1980; Smiley et al. 1991; Conand et al. 2002). However, detailed studies have not been made. Though this *S. horrens* is known to proliferate by asexual reproduction, the photograph below is the first photograph of fission of this species in Japan. Therefore, it is valuable and important for reproductive studies of sea cucumbers in Japan.

**Species:** *Stichopus horrens* Selenka, 1867  
**Location:** Nakagusuku Bay, Awarase of Okinawa Island (26°17'13.7"N and 127°52'42.4"E), Pacific Ocean  
**Date and time:** 14 December 2004, 10:30 am.  
**Depth:** 19 m  
**Bottom:** Soft mud with fine sand and silty sediment  
**Notes:** This species is known to immediately autotomize when gripped by hand. It can be seen on the photographs that the mouth of the anterior individual is large, and the mouth of the posterior one is small (Fig. 1). The mouth of the individual issued from the posterior part will be newly formed (Fig. 2).

**Figure 1.** *Stichopus horrens* in the process of fissioning into two individuals (dorsal view).

**Figure 2.** Close up of the same individual’s ventral side, showing the small newly formed mouth on the posterior part.