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Research article**Body Size Distribution and Ovarian Histology of *Pisodonophis boro* (Hamilton, 1822) (*Anguillifomes: Ophichthidae*) from Pranburi River Estuary, Thailand**

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Abstract Reproductive characteristics on the snake eel *Pisodonophis boro*, a commercially important and high-value food source species in Thailand, have never been reported. We determined the body size distribution and gonadal structure of *P. boro* during the reproductive cycle. Healthy specimens were collected by local Pranburi River estuarine fishermen during March 2015 to March 2016. The total length of *P. boro* ranged from 24 cm to 97 cm with mean value of 66.28 ± 2.59 cm ($N = 105$, mean \pm SD). Subsequent macroscopic observation demonstrated that the gonad of *P. boro* is a paired and elongated organ located parallel to the digestive tract. Surprisingly, the 105 specimens were all female, suggesting the protogynous sex reversal or spatial displacement of sexes in this species. Furthermore, only early and late perinucleolar stage oocytes were histologically identified throughout this study (synchronous developing type), which is often observed in semelparous fish species. These unique reproductive features of this eel in Thailand warrants further investigations on the male-female distribution and precise reproductive mode.

Keywords: Pranburi estuary, Reproductive organ, Snake eel, Thailand

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