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## ***Tetraodon palustris*, a new freshwater pufferfish (Tetraodontiformes: Tetraodontidae) from the Mekong Basin of Thailand**

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### **Abstract**

*Tetraodon palustris*, new species, is described from the Mekong basin of Thailand. *Tetraodon palustris* differs from *T. cochinchinensis* and *T. fangi* in having no ocellus on the flank and spinules dorsally from the interorbital region to the end of the dorsal-fin base. *Tetraodon cochinchinensis* is distinguished from *T. fangi* by having a longer snout (43.5–49.2% HL in *T. cochinchinensis* vs. 37.9–41.1% HL in *T. fangi*) and is covered with spinules dorsally from the front of the nasal organs to the end of the dorsal-fin base (vs. from the front of the eyes to the end of the dorsal-fin base in *T. fangi*).

**Key words:** *Tetraodon*, new species, Mekong basin

### **Introduction**

Studies on freshwater pufferfishes in the genus *Tetraodon* from the Mekong Basin of Thailand are included in only a few published papers. Sontirat (1989) described two new species, *Tetraodon baileyi* and *T. suvattii*, and Roberts (1998) revised the genus *Tetraodon* from the Mekong basin of Thailand and Laos providing original descriptions of *T. abei* and *T. barbatus*, and redescribing *T. baileyi*, *T. leiurus* and *T. suvattii*. *Tetraodon abei* is found in the Mekong and Chao Phraya basins while *T. barbatus* is known only from the Mekong basin.

An ichthyological survey was conducted from January 2011 to December 2012 in the Mekong basin in the northeastern region of Thailand, during which the authors collected an unknown freshwater pufferfish of the genus *Tetraodon* from marshes and swamps. The shape and colour pattern of these specimens differ from those in previous reports of *Tetraodon* from the Mekong basin, and the new species is described herein as *Tetraodon palustris*.

### **Material and methods**

Most specimens of fishes in the study were from the National Inland Fisheries Institute (NIFI), Kasetsart Museum of Fisheries (KUMF), and those collected by the authors in 2009–2012. Only specimens that were not or barely inflated were measured. Fin-ray counts and measurements were made on the left side of specimens. Measurements were made point to point with dial calipers, and the data recorded to tenths of millimeter. Standard length, total length, dorsal-fin base length, head length, snout length, interorbital distance, eye diameter, mouth width, and pectoral-, dorsal-, anal- and caudal-fin ray counts were made according to Dekkers (1975). Other measurements included internasal distance; interopercular distance; head depth and width at preorbital, postorbital and nape; interpectoral-fin distance; prepectoral-, predorsal- and preanal-fin lengths; pectoral-, dorsal- and anal-fin base lengths; depth and width of body at middle of base of dorsal fin; and caudal-peduncle length, depth and width. Subunits of the head are presented as percents of head length (%HL), while head length and measurements of body