

Identity confirmation of *Scomberomorus guttatus* using molecular tools

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Indo-Pacific King Mackerel (*Scomberomorus guttatus*), commonly called spotted seer fish and Narrow-barred Spanish Mackerel (*Scomberomorus commerson*), the common seer fish, are two very closely related species. They are epipelagic fish which are caught from most of the coastal areas around the island. They are high-value food fish favoured very much by the people of Sri Lanka. They belong to the family Scombridae, which includes mackerels, tunas and bonitos. The distinction between *S. commerson* and *S. guttatus* is mainly in the pattern on the lateral side of the body and the tip of the 1st dorsal fin. The lateral surface of the adult *S. guttatus* has several rows of dark brown or silvery grey elongated spots, while a pattern of broken vertical bands can be seen in *S. commerson*. The tip of the first dorsal fin of *S. guttatus* has a more prominent white tip than that of *S. commerson*. But these features are not very clear in the juvenile stages of the fish, and this makes it difficult to distinguish them when they are in their juvenile stages. Identification of juvenile stages is important when samples are being taken for biological studies which need specimens of all stages. Therefore, the aim of the study was to confirm the identity of specimens collected for a biological study of *S. guttatus*, using genetic identification. The DNA of the samples was extracted using a standard phenol chloroform method and a region of approximately 650 bp of the mitochondrial COI gene was amplified and sequenced. The consensus sequences were used for the identification of the species and the specimens were confirmed as *S. guttatus*. The sequences showed that the variability between the individuals is very low with almost 100% similarity seen between the individual sequences.

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