

Abstract

We were found 7 genera 17 species of marine Tetraodontid puffers in this study. The main group is *Lagocephalus* and also the dominant species are *Lagocephalus spadiceus* 63.41% and *L. lunaris* 33.7%. Total numbers of *Lagocephalus* are from Thai gulf 82.7% and Andaman Sea 17.3%. Only two species of *Lagocephalus* were used for the commercial sea food processing, while other species are fish meal product. The main foods processing manufacture are in Mahachai and Meklong. The total weight of *Lagocephalus* in food process was 109 tons (whole body fresh fish)/day; fish meat 36.7 tons/day (13,090 tons/year).

Bone and muscle of fishes are different shape and size. Also puffer fishes can be used to identified species. Puffer bones are used to identify genera status clearly. Ventral post-cleithum is flat in *Lagocephalus*, and rounded in other genera. *Lagocephalus* brain case are strongly different between species, but they are complexity in *Arothron*. Muscle mass of puffers are different from other fish groups, but very close in the same group. *Lagocephalus spadiceus* is a Z shape body mass muscle, *L. lunaris* is a W shape body mass. Another puffer species muscle mass and head muscle were used to identification. Many products of puffer are produce from *Lagocephalus* muscle mass eg; sweet fish, dry arius, dry slice meat, fresh meat, salmon color fresh meat, fish ball etc. Puffers does not have a red muscle (lateralis superficialis), they have a large dorsal fin and anal fin muscle supports for swimming or movement. Also, they had a cutaneous cover the muscle mass, because of inflation evolution reasons.