

CHAPTER 6

CONCLUSION

Seven rhiostomids were described from Thailand by previous papers including *Rhiostoma asiphon*, *R. bernardii*, *R. dalyi*, *R. housei*, *R. samuiense*, *R. smithi*, *R. tomlini* (Blanford, 1902; Moellendorff, 1894; Ruhoff, 1980; Salisbury, 1949; Solem, 1966; Tomlin, 1931). Two species were reported in recent years including *R. chupingense* and *R. jalorensis* (Hemmen *et al.*, 1999; Patamakanthin, 2001).

Three names were proposed to be synonymous i.e. *R. dalyi* a synonym of *R. housei*. *R. smithi* and *R. tomlini* synonym of *R. hainesi* which was used name *R. hainesi* in the present study.

There was not enough information for *R. bernardii* identification.

R. asiphon was re-classified to be *Pterocyclus* by the following characters, low cylindrical operculum, short genital opening in male, three cusps in first marginal teeth which differs from other rhiostomids.

Snails live mostly in limestone areas except *R. samuiense* and *R. hainesi* were found living at granitic mountains surrounding by evergreen forest.

Morphometric analysis can be used discriminate at the species level, the most appropriated mean ratios could be tool for identification, except SP/MA ratio.

Anatomical study shown very short genital opening length in male, at about one-eighths of anterior part length, which is the internal character for *Pterocyclus* whereas *Rhiostoma* has long genital opening length more than one-thirds of anterior part length.

Radula morphology of *Rhiostoma* has 3 cusps of the first marginal teeth but *Pterocyclus* has 4 cusps, which both the length of genital opening in male and the number of cusps in the first marginal teeth are the distinct characters for generic identification between *Rhiostoma* and *Pterocyclus*.

Cladogram of rhiostomids shown *P. asiphon* separated from rhiostomids group, *R. housei*, shown the plesiomorphic form which diversified to many species.

The external shell morphology is still the main characters for rhiostomids identification. Morphometric analysis, anatomical, radula morphology are associated tools for identification.

In the present study, 15 rhiostomids species were classified from Thailand, They are *Pterocyclus asiphon*, *Rhiostoma chupingense*, *R. housei*, *R. jalorensis*, *R.samuiense*, *R. hainesi* and other 9 unidentifiy species. These 9 new morphological types were classified and identified as *R. sp.1*, *R. sp.2*, *R. sp.3*, *R. sp.4*, *R. sp.5*, *R. sp.6*, *R. sp.7*, *R. sp.8*, and *R. sp.9*. These will be a new proposed for new taxon. More detail characters should be clearly studied with numbers of specimens. The new description will be proposed in the next publications.



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