

Redescription of Ishijima's types of coralline algal species (Corallinales, Rhodophyta)

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The taxonomy of living species of coralline red algae (Corallinales, Rhodophyta) has undergone marked changes since 1960. The group is now treated as a separate order of Rhodophyta and it is considered to represent a major evolutionary line within the red algae. Concepts of families, subfamilies, genera, and species have changed as a result of extensive new information. These developments have significant implications for the taxonomy of fossil coralline red algae.

From 1935 to 1979 W. Ishijima published several papers on the taxonomy of fossil calcareous algae of diverse ages from the large geographic area including Japan, Philippines, Malaysia, and Indonesia. Among many other taxa, Ishijima described fourteen new species which he attributed to the Corallinaceae (Corallinales, Rhodophyta). The study of this collection highlights the importance of re-documentation of type material of fossil taxa defined decades ago with descriptions and illustrations focused on characters different from those considered diagnostic in modern taxonomy. Re-examination of the species types from a modern perspective of coralline algal taxonomy shows that all the species have been validly published. Among them, five species are confirmed to valid, six species are assigned to different genera, one species is re-named, and two species are of uncertain circumscription within the Corallinaceae as their recognisable features do not warrant confidently delimiting the genera.