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Reniera sarai, new name for *Haliclona viscosa* Sarà
(Porifera, Demospongiae, Haplosclerida)

In 1961 (p. 50) Sarà established *Haliclona viscosa* for specimens obtained in the Tremiti Islands (Adriatic Sea). This species was subsequently reported by Rützler (1965, p. 35) from the northern Adriatic Sea and repeatedly collected in the Tremiti Islands and in the Bay of Naples by this writer. It was found to be very abundant in the superficial caves of the Tremiti Islands at depths of 2 to 5 meters, where it may reach the size of two fists; smaller specimens were obtained in the Bay of Naples from the steep walls of Punta Tiberio at depths of 20 to 30 meters and from the Santa Croce bank in 20 meters of water. The color was variable from pale cream-yellow to light brown to orange-yellow to orange-red. The shape was always massive, with circular oscules up to 10 mm in diameter at the summit of low conical processes. The texture was compact, not resilient, fragile and crumbling. All the specimens were mucous, but in a variable degree. The spicules, as to shape and size, agreed very closely with Sarà's description.

For its aspect and consistency, structure of its skeleton, large size of the oxeas and lack of spongin, this species is referable to the genus *Reniera* Nardo as originally described and as understood by later authors. Apparently, Sarà assigned it to *Haliclona* Grant in agreement with a current of opinion, introduced by Burton (1934) and followed by many authors, that does not recognize *Reniera*.

Nardo's diagnosis of *Reniera* (1833, column 519) which, although named after S.A. Renier, he spelled *Rayneria*, runs as follows: «Aggregata polymorpha magis aut minus porosa et foraminosa, tenacitate fere nulla, facile digitis pulverirabilia in sicco. Fulcimenta aculeiformia

inconspicua simplicia, dispositione varia materiei animalis ope conjuncta, ita ut pulpam uniformem prebeat.» The spelling *Reniera* was adopted by Nardo himself in a later work (1847), on which occasion he also changed the name of the type species from *typus* to *typica*.

In establishing *Reniera aquaeductus* which, as no type material from Nardo is known to exist, is generally regarded as the type species, Schmidt (1862, p. 72) gave the following diagnosis of the genus: «Halichondriae porosissimae, fragiles et quae siccae facilissime digitis in pulverem conteruntur. Spicula simplicissima et uniformia, nunquam nodosa.»

Haliclona was established by Grant for *Spongia oculata* Linné in a work which appeared between 1835 and 1841 (p. 5). Johnston gave a description and an illustration of the species in 1842 (p. 94, Pl. III) under the name of *Halichondria oculata*. Bowerbank (1864, p. 208) transferred this species to *Chalina* Grant, a genus established in 1861 which, in spite of the preference accorded to it by Topsent (1938, p. 2) must be regarded as a junior synonym of *Haliclona*. The diagnosis of the genus, given by Bowerbank on this occasion, runs as follows: «Skeleton fibrous. Fibres keratose, solid, cylindrical, and interspiculate. Rete symmetrical; primary lines radiating from the basal or axial parts of the sponge to the distal portions. Secondary lines of fibre at about right angles to the primary ones.» The structure of the skeleton was figured in Pl. XIII, fig. 262.

In 1926 (a, p. 266 and b, p. 416) Burton advanced the view that «renieroid» and «chalinoid» structures may not be regarded as generically distinctive and that an intergrading from one state to the other may occur not only within a species, but even within a single specimen. In 1934 (p. 535) he further decided that *Rayneria typus* and *Reniera typica* of Nardo are *nomina nuda* and that, therefore, the generic name *Reniera* must be abandoned.

De Laubenfels (1936, p. 47) placed the *Reniera* of Schmidt, with *R. aquaeductus* as type, in synonymy with *Haliclona*, and this opinion has been followed by many authors. After having apparently changed his mind in 1951 (p. 258), when he reported *Reniera aquaeductus* from the Hawaii Islands, de Laubenfels proposed in 1954 (p. 53) a new treatment of the problem. He first decided that *Rayneria* Nardo and *Reniera* Nardo are two distinct genera and proceeded to get rid of *Rayneria* by placing it in synonymy with *Spongilla* Lamarck. He then

admitted *Reniera*, but in a very restricted sense, as covering only tubular species. Left with more than 200 non-tubular species in *Haliclona*, he created for them a sub-genus *Haliclona* for sponges of ramose form and a sub-genus *Reniclona* for the incrusting forms. As far as known to this writer, no other author has accepted this view.

The first objection against abandoning *Reniera* Nardo is that, having a diagnosis and the type species which Schmidt assigned to it, must be considered valid. This view is supported by Topsent (1938, p. 3) who maintained the validity of *Reniera* until his last work (1945, p. 8). But there are also arguments in favour of maintaining both genera. If the two sets of diagnoses cited above are compared, it will be seen that the genera *Reniera* and *Haliclona* differ essentially in the amount of spongin. There is something more in this connection in Bowerbank's description of *Chalina* (1864, p. 208) which is worth citing: « In the sponges of this genus the spicula are decidedly subservient to the fibre, which is always cylindrical, and generally very uniform in its diameter throughout the whole of a section made at right angles to its surface; while in the nearly allied genus, *Isodictya*, the reverse is the case, the spicula being the essential basis of the skeleton, while the surrounding keratode, although often abundant, is still only the subservient cementing medium of the skeleton, and never assumes the decidedly cylindrical form of that of the fibre of *Chalina*. » Of course, in Bowerbank's conception of *Isodictya*, many *Reniera* were included.

There is no doubt that due consideration must be given to the possibility, as indicated by Burton and by Topsent, that considerable variations in spongin content and skeletal arrangement may occur within a species or even within a specimen as a result of still undetermined factors (although nothing comparable with the range of variability asserted by Burton has ever been observed in Mediterranean species of *Reniera*). Admittedly, there may be instances when the allocation of a specimen or of a species to one or to the other genus on the basis of the above diagnoses would be problematic and arbitrary. We are confident that in the future a better knowledge of more constant distinctive characters, biochemical and postembryonal for instance, shall give us a clue in regard to the generic unity or separateness of *Reniera* and *Haliclona*. Until such evidence becomes available, it appears preferable, certainly more expedient for classification purposes, to keep separate rather than merge the two. The species here discussed,

so distinctly akin to the *Reniera* group and so unlikely to present itself in a « chalinoid » state, strongly supports such an attitude.

Reniera viscosa is a species established by Topsent in 1888 (p. 149). Sarà's species therefore, which is here considered a *Reniera*, requires a new name: *Reniera sarai* is proposed.

ABSTRACT

The distinction between *Reniera* Nardo and *Haliclona* Grant is examined. *Reniera* is considered a valid and separate genus and *Haliclona viscosa* Sarà, 1961 is regarded as belonging to it. As *Reniera viscosa* is preoccupied by Topsent (1888), a new name, *Reniera sarai*, is proposed for Sarà's species.

RIASSUNTO

Viene esaminata la distinzione fra *Reniera* Nardo e *Haliclona* Grant. *Reniera* viene considerata come genere valido e distinto cui va attribuita la specie *Haliclona viscosa* Sarà, 1961. Essendo *Reniera viscosa* preoccupato da Topsent (1888), per la specie di Sarà si propone il nome nuovo *Reniera sarai*.

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