

Several Myxomycetes from Sierra Leone

By

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Abstract Ten taxa of myxomycetes are reported from Sierra Leone, West Africa. Of them six are new to this country: *Arcyria denudata*, *Ceratiomyxa* cf. *fruticulosa* var. *descendens*, *C. fruticulosa* var. *flexuosa*, *Lycogala exiguum*, *Physarum nucleatum* and *P. tenerum*.

Sierra Leone lies on the west coast of Africa and between latitudes 7°N and 10°N. In 1967, the first report of myxomycetes was published by ING. He enumerated 34 species in it. Subsequently RAMMELOO (1979) described a new species of the genus *Hemitrichia*. As far as we know, these 35 species have been recorded in this country.

In November of 1995, three of us, HAGIWARA, MURANO and SANDO, had an opportunity of visiting to Sierra Leone. They collected myxomycetes at two sites, Regent and Guma Valley, in Western Area. As a result of the examination, ten taxa were recognized. Of them six are new to this country. The specimens examined are deposited in the herbarium of National Science Museum, Tokyo (TNS).

List of species

Ten taxa belong to 8 species which are arranged alphabetically in the following list. An asterisk (*) preceding the number indicates “new to Sierra Leone.”

1. *Arcyria cinerea* (Bull.) Pers., Syn. Fung.: 184 (1801).

Specimens examined: 95SR-4, on dead wood, Guma Valley, coll. H. Murano, 15 XI 1995; 95SR-7, on dead wood, Regent, coll. H. Murano & H. Sando, 16 XI 1995.

Distribution: Cosmopolitan.

The latter specimen (95SR-7) has both digitate sporocarps and free ones. The digitate form intermixed with free one is frequently found in warm temperate, subtropical and tropical regions.

***2. *Arcyria denudata* (L.) Wettst., Verh. Zool.-Bot. Ges. Wien 35: Abh. 535 (1886).**

Specimen examined: 95SR-5, on bark and wood of dead tree, Guma Valley, coll. H. Murano, 15 XI 1995.

Distribution: Cosmopolitan.

3. *Ceratiomyxa fruticulosa* (Müll.) Macbr. var. *fruticulosa*, N. Am. Slime-Moulds: 18 (1899).

Specimen examined: 95SR-1, on dead wood, Guma Valley, coll. H. Sando, 15 XI 1995.

Distribution: Cosmopolitan.

***4. *Ceratiomyxa* cf. *fruticulosa* (Müll.) Macbr. var. *descendens* Emoto, Proc. Imp. Acad. 9: 416 (1933). (Fig. 1)**

Specimen examined: 95SR-10, on dead wood, Guma Valley, coll. H. Murano & H. Sando, 16 XI 1995.

In var. *descendens*, sporocarps are produced on the basal part of the sporophore and this basal part is sunken after drying. In these respects, this variety differs from var. *fruticulosa*.

The specimen examined is different from the usual form of var. *descendens* in its scattered sporophores with basal disks (Fig. 1A).

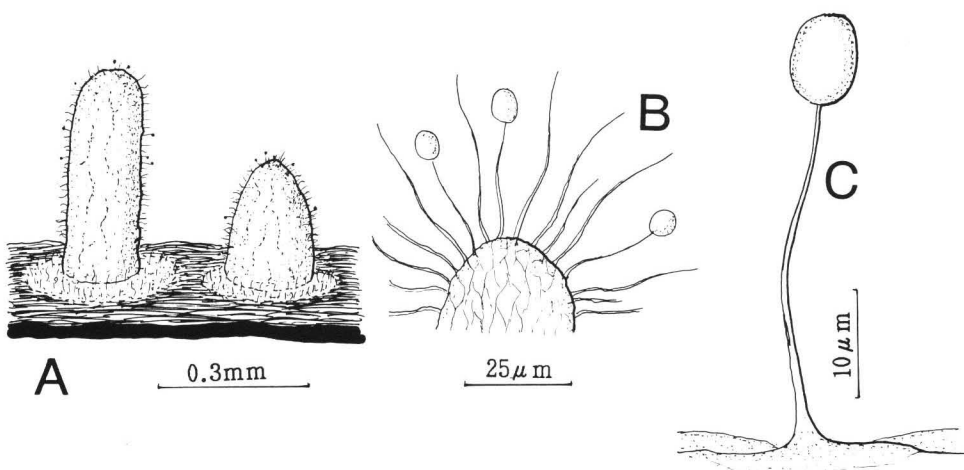


Fig. 1. *Ceratiomyxa* cf. *fruticulosa* var. *descendens* (95SR-10). A. Two sporophores. B. Tip of a sporophore. C. Sporocarp.

***5. *Ceratiomyxa fruticulosa* (Müll.) Macbr. var *flexuosa* A. Lister, Mycetozoa: 26 (1894).**

Specimen examined: 95SR-6, on dead wood, Guma Valley, coll. H. Sando, 15 XI 1995.

Distribution: Abundant in tropical regions; South Africa; France; Japan.

6. *Hemitrichia clavata* (Pers.) Rost. var. *calyculata* (Speg.) Y. Yamam., in Yamamoto, Hagiwara & Sultana, Cryptogamic Flora of Pakistan Vol. 2 (Nakaike & Malik eds.): 28 (1993).

Syn. *Hemitrichia calyculata* (Speg.) Farr, Mycologia 66: 887 (1974).

Specimens examined: 95SR-2, on bark of dead tree, Guma Valley, coll. H. Hagiwara, 15 XI 1995; 95SR-3, on bark and wood of dead tree, Guma Valley, coll. H. Murano, 15 XI 1995; 95SR-13, on dead wood, Regent, coll. H. Murano & H. Sando, 16 XI 1995.

Distribution: Common in temperate and tropical regions.

***7. *Lycogala exiguum* Morgan, J. Cinc. Soc. Nat. Hist. 15: 134 (1893).**

Specimen examined: 95SR-5, on bark and wood of dead tree, Guma Valley, coll. H. Murano, 15 XI 1995.

Distribution: Cosmopolitan.

***8. *Physarum nucleatum* Rex, Proc. Acad. Phila. 43: 389 (1891).**

Specimen examined: 95SR-11, on bark and wood of dead tree, Regent, coll. H. Murano & H. Sando, 16 XI 1995.

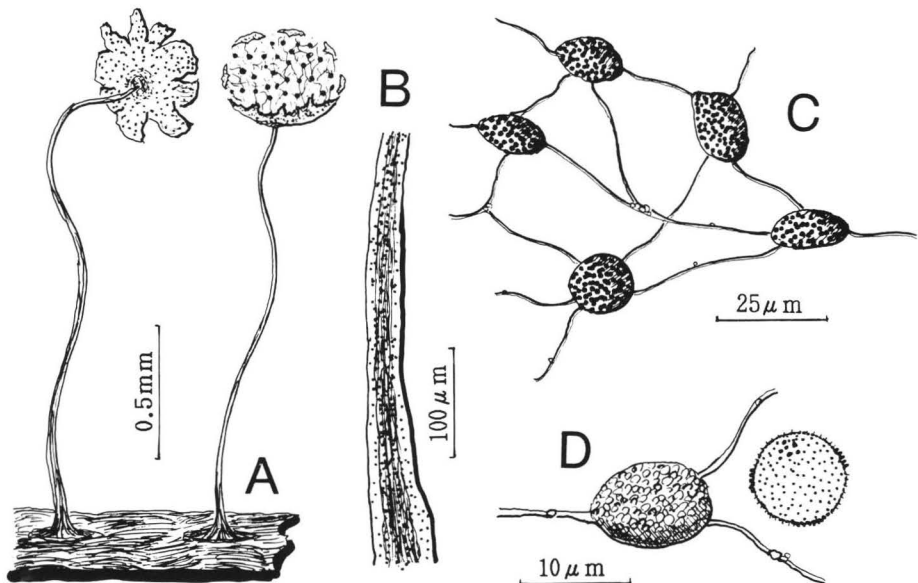


Fig. 2. *Physarum tenerum* (95SR-8). A. Two sporocarps. B. Stalk. C. Capillitium. D. Part of capillitium and a spore.

Distribution: Widely distributed in tropical regions; South Africa; England; Rumania; Japan; U.S.A.

This species is somewhat similar to *Physarum tenerum* Rex, but differs in its limeless stalk and central lime ball in the capitulum (sporangium proper).

9. *Physarum nutans* Pers., Am. Bot. Usteri 15: 6 (1795).

Specimen examined: 95SR-9, on dead wood, Regent, coll. H. Murano & H. Sando, 16 XI 1995.

Distribution: Cosmopolitan.

***10. *Physarum tenerum* Rex, Proc. Acad. Phila. 42: 192 (1890). (Fig. 2)**

Specimen examined: 95SR-8, on dead wood, Regent, coll. H. Murano & H. Sando, 16 XI 1995.

Distribution: Cosmopolitan.

The specimen is similar to *Physarum viride* (Bull.) Pers. var. *aurantium* (Bull.) A. Lister in its long stalk and color, but differs in its limy stalk and rounded lime nodes (Figs. 2B, 2C). It also differs from another similar species *P. flavicomum* Berk. in its pale yellow limy stalk, rounded lime nodes and less netted capillitium.

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