A New Variety of *Stemonitis* (Myxomycetes) from Japan

Y. YAMAMOTO

Abstract

A new variety, Stemonitis pallida WINGATE var. rubescens Y. YAMAMOTO is described and illustrated. For comparison, S. pallida var. pallida is also illustrated.

Key Words

Japan, myxomycetes, taxonomy, Stemonitis.

In the course of my study on the myxomycetes of Japan, a form of Stemonitis very much like S. pallida WINGATE was encountered frequently on the bark and/or wood of dead tress in summer. In the book "The myxomycete biota of Japan" (YAMAMOTO 1998), this form was included in S. pallida, but it is so constantly collected that I propose treating it as a new variety of that species.

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Stemonitis pallida Wingate var. rubescens Yamamoto var. nov. (Fig. 1)

A typo sporocarpiis fasciculatis, capitulis rubrobrunneis et pariete sporae dilutiore differt.

Holotypus: YY-4623 (Iaponia, Prov. Tosa, Kochi-shi, Ohtsu, Seki, in ligno carioso *Pini densiflorae*. Lec. Y. YAMAMOTO, die 31 mensis Augustii anno 1986, in TNS)

Fructifications sporocarpous. Sporocarps clustered, stipitate, up to 9 mm tall. Capitula (sporangia proper) cylindrical, rounded at both ends, reddish-brown, up to 5.5 mm long. Stalk black, polished, 1/3-1/2 the height of sporocarp, up to 3.5 mm long, hollow or opaque by transmitted light. Hypothallus membranous, silvery or dark brown, common to the colony. Peridium early fugacious. Columella a continuation of the stipe, nearly black, dispersed below the apex of capitulum, dark brown to brown by transmitted light. Capillitium arising from all length of the columella, with many main branches, flexuous, reddish-brown to very pale brown by transmitted light, branched and fused to make an intricated internal net with 3-4 meshes across the radius. Surface net two-dimensional, somewhat flexuous, with many short spines, 8-20(-40) μ m in diam. Spores nearly globose, reddish-brown in mass, brownish-gray by transmitted light, 6.1-7.7 μ m densely and evenly verruculose, (arithmetic mean = 6.7 μ m in diam., standard deviation = 0.41 μ m, n = 20). Plasmodium not observed.

Holotype: YY-4623 (On dead wood of *Pinus densiflora*, Seki, Ohtsu, Kochi-shi, Kochi Pref., coll. Y. YAMAMOTO, 31-08-1986)

Other specimes examined: YY-3247 (On dead wood, Seki, Ohtsu, Kochi-shi, Kochi Pref., coll. Y. YAMAMOTO, 27-07-1985); YY-5681 (On dead wood, Kakiyabu, Kamiyakawa, Gohokumura, Kochi Pref., coll. Y. YAMAMOTO, 1-08-1987)

Etymology: Latin rubescens, from the color of capitula.

In the key of the genus Stemonitis by MARTIN & ALEXOPOULOS (1969), this variety keys out Stemonitis axifera (BULL.) T. MACBR. or S. pallida WINGATE (Fig. 2). From the former it is distinguished by somewhat darker color of capitula, the presence of spines on the surface net, somewhat distinctly warted and larger spores. From the latter it differs in having clustered sporocarps, browner capitula and thinner spore-wall. Therefore it is intermediate between S. axifera and S. pallida. Stemonitis carolinensis T. MACBR. is differentiated from

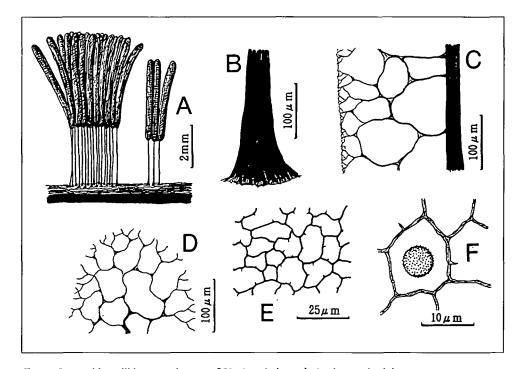


Fig. 1: Stemonitis pallida var. rubescens (YY-4623, holotype). A: clustered stipitate sporocarps. B: stalk. C: columella and capillitium. D: apical part of capitulum after spores are shed. E: surface net. F: part of surface net further enlarged and a spore.

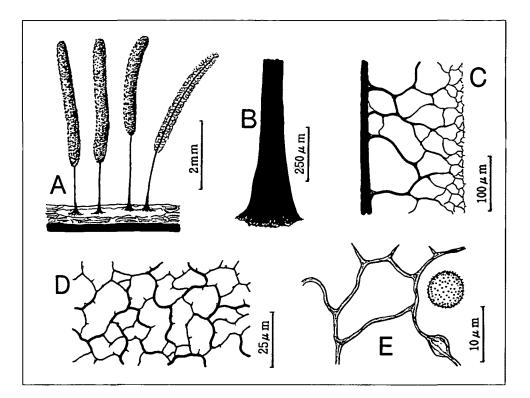


Fig. 2: Stemonitis pallida var. pallida (YY-17499). A: four stipitate sporocarps. B: stalk. C: columella and capillitium. D: surface net. E: part of surface net further enlarged and a spore.

this new variety by its shorter stalks (up to 1/5 of the height of sporocarps) and smaller meshes of surface net (3-15 µm and frequently smaller than the diameter of spores). Stemonitis graciliformis NANN.-BREMK., MUKERJI & PASRICHA differs from this variety in its shorter stalks (ca. 1/5 of the height of sporocarps) and larger spores measuring 8-9.5 µm in diam. Stemonitis flavogenita JAHN is differentiated by its columella usually expanded near the tip of capitulum and larger spores measuring 7-9 µm.

Literature

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Address of the author: Yukinori YAMAMOTO 1010-53, Ohtsu-ko Kochi-shi, 781-5102 Japan

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Autor(en)/Author(s): Yamamoto Yukinori

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