A new variety of *Hamigera avellanea* (Ascomycetes)

A new variety of *Hamigera* isolated from soil in Japan, is described and illustrated. It is characterized by white to grayish white ascomata.


var alba Morinaga, Ikeda & Nomi, var. nov.


Colonies on malt agar, attaining a diameter of 8 cm in 7 days at 28°C, composed of a basal felt with white to cream vegetative mycelia. Reverse in red brown shades. Ascomata ripening in 14 days at 28°C. Ascomata non-ostiolate, soft, white to grayish white, globose to subglobose, 120-200 μm in diameter; ascomatal wall consisting of loose thin hyphae. Asci produced singly, globose to ellipsoidal, 18-22 × 12.5-18 μm, evanescent, 8-spored, sometimes with a short stipe. Ascospores ellipsoidal, 7-8 × 5-6.2 μm, pale yellow, ornamented with mushroom-like projections. Conidiophores smooth-walled, 40-200 × 4-5 μm, arising from aerial hyphae. Metulae 2 to 4 in a whorl, 8-10 × 4-5 μm. Phialides cylindrical, 9-12 × 2.5-3 μm. Conidia in chains, hyaline to pale brown, subglobose to ellipsoidal, smooth-walled, 4-5 × 3-3.5 μm.

Production of ascomata is more pronounced on oatmeal agar, on which numerous white to grayish white ascomata may be developed.

Stolk & Samson (1971) erected the genus *Hamigera* which differed from *Talaromycetes* in producing asci singly rather than in chains. But, Pitt (1979) emphasized the manner of ascus formation is not so reliable to distinguish *Hamigera* from *Talaromycetes*. We gave our support to Stolk & Samson's opinion and proposed a new variety, *Hamigera avellanea* var. *alba*. The new variety is closely similar to *H. avellanea* var. *avellanea* except the color of ascomata and differs from *H. striata* in respect to the surface ornamentation of.
ascospores.

On the other hand, Pitt & Hocking (1979) pointed out that *T. avellanus* formed a unique anamorphic state described as *Merimbla* with characteristics differing from both *Aspergillus* and *Penicillium*. This separation is considered to be unsatisfactory for reasons that *Hamigera avellanea* var. *avellanea* HUT 4147 produced anamorphic state with both *Penicillium*-type (Pl. X 1) and *Merimbla*-type (Pl. X 2). And, anamorphic state of *H. avellanea* var. *alba* is also shown in Pl. X 3-4, presenting both types. According to Pitt & Hocking (1979), *Merimbla* is distinguished from *Penicillium* in the color of colonies. But, we recognize that morphologically *Merimbla* resembles *Penicillium* and that there are many species with light-brown colonies in *Penicillium*. Therefore, the anamorphic state of *Hamigera* seems to belong to the genus *Penicillium*.

**Literature cited**


**Explanation of plate X**


T. Morinaga, K. Ikeda & R. Nomi: Hamigera avellanea