

## Short Communication

Occurrence of *Hebeloma vinosophyllum* on the forest ground after decomposition of crow carcassToshimitsu Fukiharu<sup>1)</sup>, Gen Yokoyama<sup>2)</sup> and Teruyo Oba<sup>1)</sup><sup>1)</sup> Natural History Museum and Institute, Chiba, Aoba-cho 955–2, Chuo-ku, Chiba-shi, Chiba 260–8682, Japan<sup>2)</sup> Motofuto 2–26–4, Urawa-shi, Saitama 336–0004, Japan

Accepted for publication 29 May 2000

*Hebeloma vinosophyllum* (Basidiomycota, Agaricales), a member of the ammonia fungi, occurred on the ground in the close vicinity of the decomposed carcass of a jungle crow, *Corvus macrorhynchos*, in a forest dominated by *Quercus* spp. in Urawa, Saitama Pref., central Japan. This is the first report of an ammonia fungus occurring at the site of a decomposed wild bird carcass.

Key Words—ammonia fungi; *Corvus macrorhynchos*; *Hebeloma vinosophyllum*; jungle crow; *Quercus* forest.

The site was located in a small forest of ca. 50 m × 100 m at Amakubo 359, Nanburyo-tsuji, Urawa, Saitama Pref., 35°53'N, 139°43'E, approximately 10–15 m above sea level. This area belongs to the *Camellietea japonicae* zone and has a mean air temperature of ca. 14.5°C and annual precipitation of ca. 1350 mm (Miyawaki et al., 1975). The vegetation of the site is dominated by *Quercus* spp., composed of evergreen trees (*Quercus myrsinaefolia* Blume, *Eurya japonica* Thunberg and *Aucuba japonica* Thunberg) and deciduous trees (*Quercus acutissima* Carruthers, *Quercus serrata* Murray, *Carpinus tschonoskii* Maxim.).

Basidiocarps of *Hebeloma vinosophyllum* Hongo, a member of the “ammonia fungi” (Sagara, 1975), were observed in the close vicinity of the skull and bones of a jungle crow, *Corvus macrorhynchos* (*hashibuto-garasu* in Japanese). The basidiocarps occurred there twice in 1998, firstly on 4 Sep. and secondly on 25 Oct. (Fig. 1). When the dead crow was found at the site in early 1998, it appeared to have already been lying there since the previous year. It seems that ammonia fungus fruited within one year after the body fell to the ground. More than 50 species have been reported as ammonia fungi (Sagara, 1975, 1992), some of which have been found at sites of decomposition of the bodies of such animals as cat and dog (Sagara, 1976, 1981, 1995), man (Sagara, 1995), and rabbit (Takayama and Sagara, 1981). However, no case of a wild bird has been reported.

*Hebeloma vinosophyllum* is a biotrophic (ectomycorrhizal) fungus (Sagara, 1995). The vegetation data from the present case suggest an ectomycorrhizal relationship between *H. vinosophyllum* and the dominant *Quercus* spp. trees.

The fungus specimen is deposited at the Natural History Museum and Institute, Chiba (CBM-FB 16719).

## Literature cited

- Miyawaki, A., Okuda, S. and Inoue, K. 1975. Vegetation des SO-Teils der Präfektur Saitama. Saitama Pref., Urawa.
- Sagara, N. 1975. Ammonia fungi—a chemoecological grouping of terrestrial fungi. *Contr. Biol. Lab. Kyoto Univ.* **24**: 205–276.
- Sagara, N. 1976. Presence of a buried mammalian carcass indicated by the fungal fruiting bodies. *Nature* **262**: 816.
- Sagara, N. 1981. Occurrence of *Laccaria proxima* in the grave site of a cat. *Trans. Mycol. Soc. Japan* **22**: 271–275.
- Sagara, N. 1992. Experimental disturbances and epigeous fungi. In: “The fungal community,” 2nd ed. (ed. by G. C. Carroll and D. T. Wicklow), pp. 427–454. Marcel Dekker, Inc., New York.
- Sagara, N. 1995. Association of ectomycorrhizal fungi with decomposed animal wastes in forest habitats: a cleaning symbiosis? *Can. J. Bot.* **73**(Suppl. 1): s1423–s1433.
- Takayama, S. and Sagara, N. 1981. The occurrence of *Hebeloma vinosophyllum* on soil after decomposition of the corpse of domestic rabbit. *Trans. Mycol. Soc. Japan* **22**: 475–477. (In Japanese.)



Fig. 1. *Hebeloma vinosophyllum* occurring among the scattered bones of a jungle crow, *Corvus macrorhynchos*, after decomposition of its body in the *Quercus* spp. dominated forest. The skull is seen at the center. Photographed on 25 Oct. 1998. Scale bar=5 cm.