

black but gray at the extreme base, villose-like the lower surface of the pileus, stuffed, 2-5 cm high and 2-7 mm thick at the base. Asci eight-spored, cylindrical,  $200-300 \times 15-18 \mu\text{m}$ , J- in Melzer's reagent. Ascospores  $19-22 \times 14-17 \mu\text{m}$ , oblong-elliptic, walls slightly thickened and faintly rugulose (Fig. 4). Paraphyses 4-7.5  $\mu\text{m}$  broad, slender, septate, enlarging upward to 8-11  $\mu\text{m}$ , hyaline to yellow-brown-tinted.

Medullary excipulum 190-260  $\mu\text{m}$  broad, textura intricata, colorless near hymenium or yellow-brown near ectal excipulum, hyphae mostly 3-6  $\mu\text{m}$  broad with some hyphae inflated up to 9-15.5  $\mu\text{m}$ ; ectal excipulum 100-170  $\mu\text{m}$  broad, textura angularis, brownish, outermost cells catenuliform, scarcely projecting, not in fascicled tufts, end cells clavate,  $17-30 \times 9-18 \mu\text{m}$ , walls slightly thickened. Medium blue or with some cells dark blue in cotton blue. Stipe covering similar to pileus ectal excipulum, outermost cells dark brown, walls sometimes roughened, stipe context hyphae sometimes inflated as in the pileus excipulum.

This species is easily recognized by its drooping margins of naked pileus at the first adnate with stipe, colors of pileus and stipe, and the naked outer surface of pileus. In addition, the walls of outer excipulum are brown, while those of the medullary excipulum are typically hyaline (Dissing 1966). *H. atra* is similar to *H. ephippium* and *H. pezizoides* by its dark color and external morphology; however, the latter two species are different from the former by their villose exterior (Dissing and Lange 1967).

This species has been recorded in late spring in North America, but in Taiwan, it is found fruiting in August. It grows in rich soil among mosses in deciduous forests.

Locality: Nantou, Leleku, alt. 1,600m, Aug. 10, 1995. Coll. W. N. Chou, WAN 190. (TNM).

Distribution: Taiwan, Japan, North America, Switzerland, Europe.

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## 二種臺灣新紀錄馬鞍菌

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### 摘 要

本文報導在臺灣首次發現的二種馬鞍菌屬新紀錄種，分別是皺馬鞍菌 (*Helvella crispa* Scop.: Fr.)及黑馬鞍菌 (*Helvella atra* Holmskj.: Fr.)。

**關鍵詞：**馬鞍菌屬、盤菌、臺灣。

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