

**MELANCONIUM** Link, in Linn. Sp. Pl. ed. 4, vol. vi, part 2, p. 89.

Pustules covered by the epidermis or periderm, varying from conical and prominent to nearly flat and discoid, black. Spores subglobose to oblong or subfusoid, euseptate, always colourless when young, then dusky-brown or dark olivaceous-brown, produced singly on simple or branched sporophores which are usually rather elongated, at length pouring forth and staining the matrix around the pustules.

Most of the species occur on the twigs or branches of trees; some of them are known to be pycnidial stages of *Melanconis* or *Melanconiella*. See Grove, in Kew Bulletin, 1918, pp. 161-178, with figs.

#### **Alnus**

**Melanconium apiocarpum** Link, Sp. Pl. ii. 90 (1825). Sacc. Syll. iii. 755. All. vii. 570. Died. 856. Mig. 561. Grove, in Kew Bull. 1918, p. 166, f. 5. *M. sphaeroideum* Link, l.c. p. 92, p.p. Sacc. Fung. Ital. pl. 1079. All. vii. 568, with fig. Died. 855. Mig. p. 562, pl. 72, f. 4-7. Tul. Carp. ii. 123, pl. 21, f. 22. *M. didymoideum* Vestergr. in Hedwig. 1903, xlii. 82. Grove, l.c. f. 5 a.

Pustules rather small, globose-conical, long covered by the swollen epidermis, black with a white central columella. Spores oblong or obovoid, obtuse at both ends, especially above, with one or two guttules, smoky-brown, rather pellucid,  $10-13 \times 6-7 \mu$ ; sporophores linear, longer than the spore. (Fig. 116 d, e.)

On bark of *Alnus* spp. Common: England, Wales, Scotland.

The pycnidial stage of *Melanconis Alni* Tul.

The spores have often been described as 1-septate; this is due to an illusion produced by a flat side of an excentric angular guttule, and has led to the name *didymoideum*. See Kew Bulletin, l.c. With the *Melanconium* spores are mixed sometimes Cytospora-like spores,  $6.5-8 \times 1.5 \mu$ ; see Tulasne's fig. 22 (l.c.).

Europe.

#### **Betula**

**Melanconium betulinum** K. & S. Crypt. Exs. no. 208 (1880). Sacc. Syll. iii. 756; Fung. Ital. pl. 1082. All. vii. 572, with fig. Died. p. 857, p. 823, f. 21. Mig. p. 562, pl. 77, f. 11-14. Grove, in Kew Bull. 1918, p. 162, f. 3. *Didymosporium betulinum* Grev. Scot. Cr.