

NOTULAE AD FLORAM AGARICINAM NEERLANDICAM XXX  
MELANOLEUCA POLIOLEUCA  
FORMA PUSILLA BOEKHOUT & KUYPER

A new name for *Melanoleuca polioleuca forma oreina* (Fr.: Fr.) Boekhout

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A new name is introduced for the small-sized variant of *Melanoleuca polioleuca*, formerly also recognized as *f. oreina*. The authors demonstrate that the use of this epithet is undesirable because it is not likely that *Agaricus oreinus* Fr.: Fr. represents the same taxon.

*Melanoleuca polioleuca* (Fr.: Fr.) Kühn. & Maire is a rather variable species (Boekhout, 1988). In this complex many infraspecific taxa have been described (see discussion in Boekhout, 1988: 426). During investigations of the genus in the Netherlands, three more or less distinct morphological variants have been recognized within this species, which were given taxonomic status as forma. Unfortunately no information is available on the evolutionary relationships between those forms, and therefore the hierarchical structure presented was based on intuition. Forma *polioleuca* is considered the 'central' taxon as it is most common, whereas the short-stiped (forma *langei* Boekhout) and small (forma *oreina* (Fr.: Fr.) Boekhout) variants have been interpreted as modifications. However, it turned out that *Agaricus oreinus* Fr. (1815: 98) was sanctioned by Fries (1821: 52), while the epitheton *polioleucus* was treated as an infraspecific taxon (probably a variety) of *Agaricus melaleucus* Pers.: Fr. in the same work (Fries, 1821: 115). Therefore, the name *M. oreina* would have priority over *M. polioleuca* at the species rank, necessitating further nomenclatural changes. We do not favour such a 'nomenclatural' solution as it conflicts with the existing infraspecific hierarchy of the morphological forms within this species.

One may question whether *Agaricus oreinus* Fr.: Fr. is closely related to *A. melaleucus* γ *polioleucus* Fr.: Fr. as both taxa have been placed in different groups by their author. *Agaricus oreinus* Fr.: Fr. was placed in the *Tricholomata Personata* (pileus semper siccus, lamellae subrotundatae) (Fries, 1821: 52), whereas *A. melaleucus* Pers.: Fr. was placed in the tribe *Clitocybe* subtribe *Thrausti* (Fries, 1821: 115). Other differences can be found in the species descriptions. *Agaricus oreinus* seems to differ from *A. melaleucus* γ *polioleucus* by the presence of free lamellae ('lamellis liberis') and a pale stipe ('stipite solido pallido') (Fries, 1821: 52). In the Epicrisis (Fries, 1838: 46) the pileus was described as non-hygrophanous ('nec hygrophano'), whereas the pileus of *M. polioleuca* is somewhat hygrophanous. Moreover, as stated earlier, *A. oreinus* was reported from a rather specialized habitat ('Ericetis montosis'). Fries (1838, l.c.) referred to a plate of *Agaricus testudineus* Pers., which is an obese fungus with a short stipe, clearly different from the small-

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sized variant of *M. polioleuca*. Contrary to our earlier interpretation (Boekhout, 1988) we presently think it unlikely that *A. oreinus* is conspecific with *A. melaleucus* γ *polioleucus*. *Agaricus oreinus* Fr.: Fr. seems best interpreted as a nomen dubium.

A second name used for this small variant is *Melanoleuca* (*Agaricus*, *Tricholoma*) *humilis* var. *fragillima* (Fr.) Bon. The small-sized variant of *M. polioleuca* differs in some aspects from the description of *Agaricus humilis* var. *fragillima* Fr. The most striking difference is the hollow stipe of *A. humilis* var. *fragillima* (Fries, 1838: 52, 'stipite longiori cavo fibrillosi'), although this was not reported in this author's earlier description (Fries, 1821: 51). The original description of *A. humilis* var. *fragillima* was very short ("Var. tota fragillima, pileo flavescente, stipite fibrilloso notabilis. In arvis, areis hortorum, pratis & collibus. Sept.–Nov. v.v."). No information was provided on the microscopic morphology, which is very important in the taxonomy of the genus. Therefore, we are unable to link *A. humilis* var. *fragillima* with any of the currently recognized taxa in *Melanoleuca*. *Agaricus humilis* Pers. has been considered doubtful (Boekhout, 1988), and the same holds for its variety. Consequently, we prefer to introduce a new name for the small-sized variant of *Melanoleuca polioleuca* (Fr.: Fr.) Kühn. & Maire, for which we propose *Melanoleuca polioleuca* forma *pusilla* Boekhout & Kuyper.

### ***Melanoleuca polioleuca* forma *pusilla* Boekhout & Kuyper, *forma nov.***

A varietate *polioleuca* differt basidiocarpi minoribus. Pileus 17–35(–45) mm diam., carne tenui, dilute griseo-brunneus, in medio paulo obscurior, siccus pallescens. Lamellae densae vel fere distantes, emarginatae vel sinuatae vel nonnumquam subdecurrentes, albidae. Stipes 25–75 × 2–4 mm, albidus, deinde dilute brunneus vel griseo-brunneus, sursum flocculosus. Contextus pilei albidus vel dilute bubalinus, in parte superiore stipitis dilute bubalinus vel griseo-brunneus, ad basim obscure brunneus. Structurae microscopicae sicut in varietate *polioleuca*. Habitat ad terram, praecipue in pratis, sed etiam in silvis latifoliis solo fertili incidentibus. In Neerlandia fere communis ad dunas litorales, sed etiam ad loca a mari remota. – Holotypus: *C. Bas* s.n., 25 Nov. 1953, in Horto botanico (L).

Differs from the typical variety by smaller basidiocarps. Pileus 17–35(–45) mm, thin-fleshed, pale greyish brown (Munsell 10 YR 5/3–4), with somewhat darker centre, becoming paler on drying. Lamellae crowded to rather distant, emarginate to sinuate or occasionally even subdecurrent, whitish. Stipe 25–75 × 2–4 mm, whitish, becoming pale brown to grey-brown (Munsell 10 YR 5/4, 3/3), at apex flocculose. Context of pileus whitish to pale yellowish brown, in the upper part of the stipe pale yellowish brown to greyish brown, towards the base dark brown. Microscopical characteristics as in typical variety. Grows terrestrially, mainly in grasslands, but also in broad-leaved forests on rich soils. In the Netherlands rather common in coastal dunes, but also occurring inland.

Holotype: *C. Bas* s.n., 25 Nov. 1953, Leiden, Hortus Botanicus (L).

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