

## BRIEF ARTICLES

### ON *PILODERMA BICOLOR* IN NORTH AMERICA AND ITS RELATIONSHIP TO *PILODERMA BYSSINUM*

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In a recent treatment of *Piloderma*, Eriksson *et al.* (1981) proposed a "new species" name, *Piloderma croceum* Erikss. et Hjört., for a fungus that had previously been called *P. bicolor* (Peck) Jülich. Their reason for dropping Peck's name from usage was because it had been used widely and for an extended period of time in a sense that excluded the nomenclatural type (Article 69). Eriksson *et al.* concluded that *P. bicolor* had been applied to a species concept that was the same as *Piloderma byssinum* (Karst.) Jülich. The issues of the application of the name *P. bicolor*, its proposed synonymy, and its relationship to *P. byssinum* are taken up here.

When Peck (1873) described *Corticium bicolor* Peck, he quite explicitly and clearly stated what he had in hand; a fungus that was "Thin, membranaceous, resupinate . . . smooth, separable . . . under surface greenish yellow, upper surface white. Rotten Wood. Center (New York). October." Peck's type at Albany is well preserved and captures the essence of his description with the exception of the color. The "under surface" is no longer "greenish yellow," but has faded to a pale cream yellow with only a faint citrine cast. In addition, rhizomorphs are readily demonstrable in the type and are colored similarly as the "under surface." Because Peck did not mention rhizomorphs or their color, it cannot be established definitely whether or not they have faded. However, we may safely presume that the rhizomorphs were concolorous; if not, Peck, who was an astute observer, would have noticed a difference.

We now arrive at the central issue in question: does Peck's name apply to the fungus that in North America has consistently (Burt, 1926; Rogers and Jackson, 1943; Gilbertson, 1974; Martin and Gilbertson, 1977) been interpreted as one with yellow-colored rhizomorphs and subiculum, and a white pellicular hymenium? A comparison of Peck's type with traditional representatives that in the past have been referred to *Corticium* (*Athelia*, *Piloderma*) *bicolor* in North America supports the view that Peck's name is correctly applied.

Therefore, I disagree with Eriksson *et al.* (1981) when they state ". . . since 1950 (Lundell and Nannefeldt, Fungi exs. succ. No. 1841) (*P. bicolor*) has been widely and persistently used as a name not including the type, we suggest it being listed as a *nomen rejiciendum* (Art. 69: 1), thus avoiding the troubles a change of names inevitably would cause." The name has been correctly applied in North America. Misapplication of the name in Europe should not cause it to fall into disuse.

In addition to the problem of the identity of *P. bicolor*, its relationship to *P. byssinum* should also be addressed. Karsten's (1884) description of *P. byssinum* is quite clear. His type at Helsinki is in excellent condition and fits the description well. A comparison of Peck's and Karsten's types indicates that there are differ-

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ences between the two, especially in spore size. Also, there is no evidence to indicate that Karsten's material ever had a yellow pigment associated with it. His fungus is white throughout.

The nature of the crystalline material adhering to hyphae was emphasized by Eriksson *et al.* (1981) as a means to separate their concepts of "*P. byssinum* (= *P. bicolor sensu* Eriksson *et al.*) from *P. croceum* (= *P. bicolor sensu* Jülich)." Though scanning electron microscopy was not employed in this study to view characteristics of encrusting crystalline material, phase contrast and brightfield light microscopy more than adequately demonstrated both kinds of encrusting material in numerous North American specimens representative of *P. bicolor* (Peck) Jülich. The use of such a character appears to have its limitations and may not be as reliable as originally perceived.

*Piloderma bicolor* is the correct name for the yellow rhizomorphic fungus in North America. It is closely related to, but distinct from, *P. byssinum*.

Key Words: *Piloderma*, taxonomy.

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