

## AN OPINION ON THE VALIDITY OF THE GENERIC NAME *POSTIA* FRIES 1874 (EUMYCOTA: APHYLLOPHORALES)

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In December 1995, Mr J.A. Simpson, State Forests of New South Wales, asked me for an opinion on the validity of publication of the generic name *Postia* Fries (1874). At his request, my reply to this enquiry is given here, with some additions and amendments.

The generic name *Postia* was first used by Fries (1874, p. 523) in a discussion of the genus *Polyporus*. Later in the same work (p. 586), under *Daedalea*, it was distinguished from other related polypore genera by several characters, and six species (indicated by number) were included in it. No type species was designated, no new combinations were made and the name *Postia* was not listed in the text in the numbered series of other genera treated in the *Hymenomyces Europaei*. In recent years, the genus has been used by several authors (Jülich 1982; Larsen & Lombard 1986; Pegler & Saunders 1994; Redhead & Ginns 1985; Renvall 1992, amongst others) for taxa placed previously in the genus *Tyromyces* P. Karsten (1881, p. 17), but which cause a brown wood rot (in contrast to the type species of *Tyromyces*, *T. chioneus* (Fries) P. Karsten, which causes a white wood rot, see Redhead & Ginns 1985). An analysis of the literature by Redhead & Ginns (1985) led them to conclude '.... that the ability to produce a brown-rot is a highly significant taxonomic feature among the higher basidiomycetes'. Jülich (1982) considered *Postia* in detail, transferred 18 species to it, and gave a key distinguishing *Postia* from related genera.

Several other workers, however, adopt a different view about use of the name *Postia* for these brown rot taxa. Although Donk (1960) considered that *Postia* Fries was '.... validly published by Fries in accordance with the present Code', he accepted it only grudgingly and remarked that '.... there is much in favour that the fungus-name *Postia* Fr. be rejected in favour of *Tyromyces* P. Karst. at least until the taxonomy of that genus has been improved'. Later, he (Donk 1974) listed *Postia* Fr. as a synonym of *Tyromyces* P. Karst. Rejection of *Postia* has also been proposed by Gilbertson & Ryvardeen (1987), Ryvardeen (1991) and Ryvardeen & Gilbertson (1994) for various reasons (see below) and Ryvardeen & Gilbertson (1994) placed the brown rot taxa forming fleshy annual basidiomata and having a monomitic hyphal system with clamp connections in the genus *Oligoporus* Brefeld (1888).

The last three editions of the *Dictionary of the Fungi* are rather ambivalent in their treatment of *Postia* Fr. The sixth edition (Ainsworth, James & Hawksworth 1971) distinguished *Postia* Fries (1874) from *Postia* E.P. Boissier & E. Blanche (1875, Asteraceae) and commented that *Postia* Fr. is an earlier name for *Tyromyces*, giving Donk (1960, see above) as the authority. The seventh edition (Hawksworth, Sutton & Ainsworth 1983) changed tack and listed *Postia* Fr. as a facultative (heterotypic) synonym of *Tyromyces*, again giving Donk (1960, see above) as the authority. The recent eighth edition (Hawksworth, Kirk, Sutton & Pegler 1995) repeats the entry from the seventh edition, changing only the family given for *Tyromyces* from Polyporaceae to Coriolaceae.

In order to determine the status of *Postia* Fries (1874), the literature has been examined in the light of the provisions of the current nomenclatural code (International Code of Botanical Nomenclature, 1994 (ICBN)). The results of that examination are presented in this note.

### A. The ICBN and the case of *Postia* Fr. 1874.

Conditions for effective and valid publication of fungal names are set out in Articles 29–45 inclusive of the ICBN. Those relevant to the case of *Postia* Fries are dealt with below.

1. *Effective publication*: *Postia* Fr. was published in the second edition of *Hymenomyces Europaei* (1874), a major work on the basidiomycetes and its inclusion in this work ensured its effective publication, in accordance with Arts 29–31.
2. *Form of the name*: the name *Postia* has a form which complies with the requirements of the ICBN.

3. *Description*: *Postia* was first mentioned as a new genus on pp. 522–523 of Fries (1874), with reference to a fuller treatment later in the work (under *Daedalea*). On p. 586 (under *Daedalea*), it was described as a separate genus. Translations of the relevant paragraphs are given below:

pp. 522–523:

'In *Nov. Symb.* l.v., different *Polypori*, *Polysticti* and *Trametes* were dealt with. To these is added the new genus *Postia*, which is discussed under *Daedalea*.'

p. 586:

'Excluding *Lenzites* and *Trametes*, *Daedalea* is a strictly defined genus, although definitely related to these. More distant are several *Polypori* with sinuous, labyrinthiform and intricate pores, which see nos 74–76, 84, 88, 110, etc. which differ from genuine *Polyporus* as *Daedalea* from *Trametes*. They are readily distinguished from *Daedalea* by flesh initially soft and moist, by delicate narrow pores, thin dissepiments and a trama showing no discolouration. These are established as a special ('peculiare') genus under the distinguishing name *Postia*.

4. *Reference to included species*: as can be seen from the above, several species formerly in *Polyporus* are referred to by number for inclusion in the new genus.

5. *Intention of the author*: there can be no doubt that Fries, in his original mention of *Postia* on pp. 522–523, intended to establish a new genus and that later in the same work, on p. 586, he distinguished it from related genera with a set of diagnostic characters and gave it the name *Postia*.

In Art.34 of the ICBN there are several conditions set out under which a name is not validly published. Their application to *Postia* Fr. is as follows:

1. *Non-acceptance by the author in the original publication*: Fries (1874) did not make any new combinations in *Postia*. However, from the evidence presented above, it is clear that he (a) described it (b) distinguished it from other related genera and (c) listed several species by numerical references for inclusion in it. Moreover, his use of the phrases 'novum genus *Postia*' and 'peculiare genus sub *Postiae* nomine' clearly shows that he fully intended to establish a new genus.

2. *Proposal as a provisional name*: it is clear that Fries did more than provisionally propose the genus; he took several steps showing that he firmly established the genus *Postia* and distinguished it from related taxa.

3. *Citation as a synonym*: *Postia* is not just listed as a synonym.

4. *Mere mention of subordinate taxa*: *Postia* is not published by mere mention of subordinate taxa. It is described, points of difference from other genera are mentioned and several species for inclusion in the new genus are listed.

#### **B. Recent arguments against use of *Postia* Fries 1874.**

As noted above, several workers reject *Postia* Fries for several reasons. Most of these are set out in the publications of Ryvar den and Gilbertson but these authors have several errors of fact in their accounts. These are:

(i) '... Fries (1874) himself gave no indication that he intended to publish a new genus ...' (Ryvar den & Gilbertson 1994, p. 398). The translations given above of Fries' text show that is wrong; in fact, the reverse is the case, as shown by use of the phrases 'novum genus' and 'peculiare genus' referred to above.

(ii) Fries '... used the name only in the middle of two sentences ....' (Ryvar den & Gilbertson 1994, p. 398). In fact, Fries took one sentence on his pp. 522–523 to say that he intended to establish a new genus, and he took a whole paragraph on p. 586 to give its description, diagnostic characters and list of some included species.

(iii) Ryvar den (1991) lists the name '*Postia* Karsten 1881'. This is an error. There is no '*Postia* Karsten'; when Karsten (1881, p. 17) used the name, he listed it as '*Postia* Fr.' and included six species in it. Thus, there is no basis for the statement made by Ryvar den & Gilbertson (1994, p. 398) that 'When Karsten (1881) took up *Postia*,

it was illegitimate because of *Postia* Boiss. & Blanch. (Saxifragaceae, 1875)'. The genus *Postia* E.P. Boissier & E. Blanche (which is Asteraceae, not Saxifragaceae) was published in 1875, one year later than *Postia* Fries (1874) and thus the Boissier & Blanche name is an illegitimate later homonym of Fries' name. Moreover, Maberley (1987) indicates that the four western Asian taxa formerly included in *Postia* Boissier & Blanche are now placed in the genus *Rhanteriopsis* Rauschert, so no problems would be caused to botanists by use of *Postia* Fries.

(iv) Ryvar den & Gilbertson (1994) make much of the fact that the name *Postia* is not set typographically in the text like the other genera and seem to regard this as a lack of intention on Fries' part to publish a new genus. Why Fries treated *Postia* in this way is not known and present conjecture on the typography of the name will not solve this problem. What is clear, however, from Fries' own words, is his intention to establish a new genus (pp. 522–523) and the carrying-out of that intention (p. 586) in a manner completely in accord with the provisions of the ICBN.

### C. Typification

Donk (1960) selected *Polyporus lacteus* Fr.: Fr. as lectotype of *Postia* Fries (1874) from the several species listed (by number) by Fries. This was accepted by Jülich (1982) who also transferred 18 other taxa to this genus. *Polyporus lacteus* was transferred to *Postia* by Karsten (1881). It should be noted that Ryvar den & Gilbertson (1994, p. 435) cited *Polyporus lacteus* Fr.: Fr. (*Syst. mycol.* 1: 359, 1821) as a synonym of *Oligoporus tephroleucus* (Fr.: Fr.) Gilb. & Ryvar den, based on *Polyporus tephroleucus* Fr.: Fr. (*Syst. mycol.* 1: 360, 1821). As can be seen, *P. lacteus* is the earlier name and, if the names are treated as synonyms, it has priority. It is noted that they are treated as separate species by both Jülich (1982) and Pegler & Saunders (1994).

### D. Discussion and conclusion

The present investigation was a purely nomenclatural one, to try and answer the question posed to me—in your opinion, was *Postia* Fr. validly published? My answer to this is an unequivocal yes and that the generic name *Postia* Fries 1874 fulfils all the provisions of the ICBN (1994) for both effective and valid publication. Fries was quite clear about his intention and, in the execution of this intention, did all that was required to validate his new genus. The absence of any new combinations and the difference in typography are not, in my opinion, sufficient to overturn the force of Fries' own words and actions, as given on pp. 522–523 and p. 586 of *Hymenomyces Europaei* 1874.

The implications of this finding for the group of genera related to *Postia* have not been followed through. Both Jülich (1982) and Pegler & Saunders (1994) give keys distinguishing the several genera in this complex. Finally, nomenclaturalists being what they are, it would not surprise me if others disagreed with the views that I have expressed here!

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#### Acknowledgements

I thank Jack Simpson for raising the interesting question of *Postia* Fries 1874 with me and for providing copies of references. I am also grateful to the N.S.W. Department of Agriculture and to the Agricultural Scientific Collections Trust for access to the libraries of the Biological and Chemical Research Institute, Rydalmere and of Herb. DAR.

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