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Fomitopsis africana nov. sp. (Polyporaceae, Basidiomycotina)

D. C. Mossebo¹ & L. Ryvarden²

¹ Mycological Laboratory, University of Yaoundé, P.O. Box 1456, Yaoundé, Cameroon ² Botany Division, Biological Institute, University of Oslo, P.O. Box 1045, Blindern, N-0316 Oslo, Norway

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Fomitopsis africana Mossebo & Ryvarden is described as new and characterized by a flabellate, dimidiate to semicircular basidiocarp, pinkish context, dimitic hyphal system and navicular spores.

Keywords: Fomitopsis, Polyporaceae, Basidiomycotina, Cameroon.

Brown rot fungi are in general rare in the tropics compared with the boreal zone (see Ryvarden 1991: 54), but *Fomitopsis* is an exception, since there are equally many species in both zones. Most tropical species of *Fomitopsis* belong in the group with a pinkish context, and a survey of these is given in Carranza-Morse & Gilbertson (1986). Later, Kotlaba & Pouzar (1990) described *Rhodofomes* with *Polyporus roseus* Alb. & Schw. : Fr. as type species to encompass these species. Besides the pinkish context, Kotlaba & Pouzar described the spores as thick-walled, an observation we are unable to confirm from fresh spore prints of the type species. *Fomitopsis* P. A. Karsten is typified by *Polyporus pinicola* Swartz: Fr., a boreal, perennial species with a laccate upper surface and a more or less whitish context.

In Africa, *Fomitopsis* is represented by the following species: *F. carneus* (Blume & Nees) Imazeki, *F. nivosa* (Berk.) Gilb. & Ryvarden, *F. rhodophaeus* (Lév.) Imazeki, *Fomitopsis spraguei* (Berk. & M. A. Curtis) Gilb. & Ryvarden and *F. zuluensis* (Wakef.) Ryvarden. Descriptions of all these species can be found in Ryvarden & Johansen (1980) or Gilbertson & Ryvarden (1986).

In July 1996 one of us (D. C. M.) collected a flat, flabelliform polypore with pink to beige context causing brown rot in a post of *Eucalyptus* near Yaoundé in Cameroon. When examined macroscopically in Oslo, it was initially taken as an old and weathered specimen of *F. feeii* (Fr.) Kreisel which, however, is not known from Africa. Further, a microscopical examination revealed that the spores were

grossly different from those of E feeii. A search in available literature on Fomitopsis gave us no help, and this and the distinct navicular spores, convinced us that the species was undescribed. Further, the species was brought into culture from fresh specimens taken from the same post as the original collection. A number of tests were undertaken on the living culture (for technical details, see Stalpers 1978 and Marr 1979). The results showed that it did not produce enzymes able to degrade lignin, thus confirming the field observation that the new species really is a brown rot fungus.

Fomitopsis africana Mossebo & Ryvarden, sp. nov. - Fig. 1.

Fructificatio pileata, pileus pallide brunneus, pori rotundati, 3–4 per mm, fumosi ad fuscos, contextus roseus, systema hypharum dimiticum, hyphae generatoriae fibulatae, hyphae sceletales hyaline vel pallide flavae, cystidia nulla, sporae hyalinae, tenuitunicatae, cylindricae vel naviculiformes, $6-7 \times 2-2.5$ mm.

Holotypus: Cameroon, Yaoundé, at The International Institute of Tropical Agriculture (IITA), on a post of *Eucalyptus* sp, 2. July 1996. Coll. D. C. Mossebo P. 13. (O), isotypus in (K).



Fig. 1. – Fomitopsis africana. – A. Basidiocarp. – B. Section of basidiocarp. – C. Generative hyphae. – D. Skeletal hyphae from the trama. – E. Skeletal hyphae from the context. – F. Basidiospores. From the holotype.

Basidiocarp pileate, dimidiate, flabelliform to semicircular, applanate or slightly convex and sometimes slightly imbricate, up to 10 cm long, 6 cm wide and 10 mm thick, coriaceous, upper surface dull, first very finely adpressed velutinate, then becoming glabrous from the base, slightly zonate and radially streaked, dark brown becoming paler towards the margin, pore surface dirty brown with pink shades, almost pure pink in active specimens, pores round to slightly angular 3-4 per mm, tubes pale pink, up to 3 mm thick, context fibrous cottony, pale pink, up to 5 mm thick at the base. -Hyphal system dimitic; generative hyphae with clamps, hyaline, 1-3 mm wide, skeletal hyphae dominating in the basidiocarp, hyaline to pale yellow in KOH, thick-walled, in the trama slightly sinuous 2-4 mm wide, in the context straight 3-7 mm wide. - Basidia clavate, 24-30 × 5-6 mm with four sterigmata. - Cystidia not seen. -Basidiospores hyaline, thin-walled, cylindrical to navicular, $6-7 \times 2-2.5$ mm negative in Melzer's reagent.

Type of rot. - Brown rot.

Substrata. - Only found on a post of *Eucalyptus* sp.

 $Distribution.\ -$ Known only from the type locality in Cameroon.

This new species is well defined by its brown rot, beige to slight pinkish context, dark brown dull upper surface and the cylindrical to navicular basidiospores. *Fomitopsis feeii* (Fr.) Kreisel, which is not found in Africa, is undoubtedly the closest relative, separated by a pinkish upper surface, a strongly pink or very pale cherry red context at least when fresh, a distinct trimitic hyphal system, and shorter spores.

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