SOUTH AFRICAN PERISPORIACEÆ.

II. REVISIONAL NOTES.

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(With three Text-figures.)

In working through a number of fresh collections of South African Perisporiaceae, it has become evident that certain species described in my previous paper* on this group need revision. On p. 726 of the above-mentioned publication Meliola torta is described on the leaves of Trichocladus crinitus, and it is stated that there is another Meliola associated with this on the same leaves, with 4-septate spores and no setse, but this was badly parasitised and could not be determined. In examining fresh collections of fungi on the same host, it has become evident that some confusion has arisen owing to the fact that there are at least four fungi (possibly more) on the same leaves.

One of these is an Asterina; of the others, in the first collection of Trichocladus the perithecia of Meliola torta were immature, and the spores of a fungus parasitic on the Meliola, and having similar perithecia, were described as those of Meliola torta. In later collections mature perithecia of Meliola torta were found with large 4-septate spores. It therefore becomes necessary to redescribe Meliola torta, and to describe the fungus parasitic on the two Meliolas. Mature non-parasitised material of the second species of Meliola was also found, and, as it appears to be a new species, I have named it Meliola scabra, on account of the frequently scabrous character of the capitate hyphopodia.

Meliola torta Doidge, char. emend.

Amphigena, maculas atras, tenues, 5–10 mm. diam. efficiens; hyphis tenuibus, 6–7 μ crassis, tortuosis, anastomosantibus, cellulis 25–36 μ long.; ramis irregularibus, plerunque unilateralibus; hyphodiiis capitatis stipitatis, tenuibus, stipitis nonnunquam septatis, cellula superiore 14–25 × 14–20 μ, diverse lobata, torta, apice obtusa v. convexa; hyphodiiis mucronatis ampullaceis, 20–36 μ long.; setis mycelieis non numerosis, sparsis, rectis, simplicibus, basi 10–11 μ cr., apice acutis; peritheciis paucis, sparsis, atris,

globulosis, rugulosis, 250–400 μ diam.; ascis 2-sporis; sporidiis ellipsoideis, compressis, 4-septatis, ad septa constrictis, cellula media majore, 54–67 × 20–22 μ × 17 μ.

Hab. in foliis *Trichocladi criniti*, Izelini, Kingwilliamstown Dist., 8/6/15 (9064), Woodville Forest, George, 11/11/17 (10939).

*Meliola scabra* Doidge, n. sp.

Amphigena, maculas atras tenues 5–10 μ diam. efficiens; hyphis, 6–7 μ crassis, flexuosis: ramis plerumque oppositis; cellulis 24–30 μ long.; hyphopodiis capitatis alternis, breviter stipitatis, 23–30 μ long. cellula basali 6–7 μ long., cellula superiore ovata v. sub-uncinata, plerumque irregulariter sublobata, scabra; hyphopodiis mucronatis inter hyphopodia capitata interspersis, oppositis v. unilateralibus, ampullaceis, apice interdum curvatis; setis mycelicis nullis; peritheciis atrim, carbonaceis, rugulosis, 200–250 μ diam.; ascis 2-sporis; sporidiis 4-septatis, utrinque rotundatis, vix ad septa constrictis, 36–40 × 14–17 μ.

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**Fig. 1.** *Meliola torta.* (a) Mycelium with capitate hyphopodia; (b) mucronate hyphopodia; (c) superficial cells of peritheciun; (d) spores. [All figures drawn with the aid of camera lucida, with Zeiss objective D and No. 5 ocular.]
In foliis Trichocladii elliptici, 15/3/15, Tabankulu, Transkei, leg. G. Fraser (8891).

Fig. 2.—Meliola scabra. (a) Mycelium with both capitate and mucronate hyphopodia; (b) superficial cells of perithecium; (c) spores.

Perisporina meliolicola Doidge n. sp.
Hyphis ramosis, septatis, tenuibus, 3–3.5 μ cr., perithecii atris, subglobosis, glabris, membranaceis, 160–180 μ diam.; ascis numerosis, paraphysatis, 8-sporis, ellipsoideis-oblongis, breviter pedicellatis, 60–66 x 18–20 μ; paraphysibus simplicibus, filiformibus, hyalinis, ascos leniter superantibus; sporidiis distichis v. subtristichis, primum hyalinis, cellula superiore breviore, latiore, deinde, 3-septatis, clavatis, ad septa, vix constrictis, cellulis extremis valde minoribus, 25–30 x 7–11 μ.
Hab. in mycelio Meliolae glabrae et Meliolae tortae in foliis Trichocladii criniti, Izelini Forest, Kingwilliamstown, 14/6/15 (9064).

Another point to which I wish to draw attention is the nomenclature of the Meliola commonly found on Rubus and also recorded on Pygeum africanum. The early collections of this fungus were submitted to Sydow
for determination, and he, following Gaillard,* named the fungus *Meliola manca.* In a recent publication † F. L. Stevens writes as follows:

"In 'Le Genre Meliola,' Gaillard writes under *Meliola manca* the three species *M. manca, M. sanguinea,* and *M. puiggarii,* giving a new description of *M. manca.* This new description mentions larvaeform perithecial appendages. The original description of *M. manca* by Ellis and Martin mentions no such appendages, but does specifically state that there are no perithecial appendages. My own material of the two collections is ample. I have studied it carefully, also a specimen of the Heller collection, and a specimen collected by Martin and distributed by Ellis as N.A.F. No 1292, all of these upon the same host (*Myrica cerifera* L.). These specimens all agree perfectly, and agree with the original description. They do not have larvaeform perithecial appendages, and therefore do not conform with the description as given by Gaillard.

![Fig. 3.—Perisporina meliolicola. (a) Immature and (b) mature spores.](image)

"The specimens of *Meliola* which have been found on *Rubus* agree well with the description of *Meliola puiggarii.* They have abundant larvaeform appendages, and cannot be placed under *M. manca.* Moreover, both the general characters of the mycelium and the capitate hyphopodia separate the forms on *Rubus* from those on *Myrica,* the hyphopodia on *Rubus* being much larger and more irregular in shape. I am forced, therefore, to regard the description given by Gaillard for *M. manca* as erroneous, and that of Ellis and Martin as correct, and to recognise *M. puiggarii* on *Rubus* as an entirely different species."

In view of the evidence thus clearly set forth, and after examining specimens of both species kindly sent me by Mr. Stevens, I am driven to conclude that the South African specimens on *Rosaceae* which have abundant larvaeform perithecial appendages should be named *M. puiggarii.* The South African specimens agree with the Porto Rico specimens of *M. puiggarii,* the only difference being that the larvaeform perithecial appendages are, if any-

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* *Le Genre Meliola,' p. 37.
thing, less numerous and rather shorter on the South African specimens.
I have also to record this fungus on a number of new hosts in addition to
those already mentioned, as follows:

*Meliola puiggarii* Speg.

On leaves of *Rubus rigidus*, Winter’s Kloof, Natal, 17/6/11, E. M. Doidge
(1574); Woodbush, Zoutpansberg Dist., 5/8/11, E. M. Doidge (1771);
Cramond, Natal, 3/6/12, I. B. Pole Evans (2405); Knysna, C.P., 3/6/12,
P. J. Pienaar (2425).

On leaves of *Rubus pinnatus*, Bucceleuch, Natal, 20/4/16, J. M. Sim
(10150).

On leaves of *Pygeum africamum*, Woodbush, Zoutpansberg, 3/8/11, E. M.
Doidge (1761).

On leaves of *Cliffortia strobilifera*, van Staden’s Pass, 13/11/17, E. M.
Doidge (10859).

On leaves of *Cliffortia ferruginea*, van Staden’s Pass, 13/11/17, E. M.
Doidge (10861).

On leaves of *Leucosidea sericea*, Nottingham Road, Natal, 8/4/11,

I wish also to call attention to an error in the Explanation of Plates
which was overlooked in correcting the proofs. Plate LXIII, fig. 24, is
named *Meliola Peglerae*; this figure illustrates *M. inermis*; and the fig. 25,
Plate LXI, which is called *M. inermis*, should be *M. Peglerae*. 

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