

## MICROTYPHA

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THE genus *Microtypha* (Fungi Imperfecti-Dematiaceæ-Macronemæ-Amerosporæ) was described by Spegazzini in 1911 (*Anal. Mus. Nac. B. Aires*, 3 ser., 13: 432) with *M. saccharicola* Speg. as the type species. *Microtypha* was characterised as follows: "Hyphomycetea dematiea, macronemea; hyphæ fertiles erectæ articulatae, simplices graciles prope basim nudæ cæterum dense minuteque papillato-asperæ; conidia unicellularia in papillis solitarie acrogena, dense constipata fuliginea, massam cylindraceam constituenta" (Saccardo, 1913, p. 1352). *M. saccharicola* was described as follows: "Hyphis sterilibus nullis, fertilibus dense gregariis, rectis v. subcircinatis fumosis, subtorulis, parte nuda brevi,  $15-20 \times 4-5 \mu$ , capitulo cylindrico obtusiusculo  $100-250 \times 16-20 \mu$  aterrimo; conidiis ellipsoideis, utrinque rotundatis,  $5-6 \times 3-4 \mu$  subopacis, eguttulatis, levibus" (Saccardo, 1913, p. 1352).

In the course of studies on hyphomycetes, I have examined, through the courtesy of Dr. J. C. Lindquist, type material of Spegazzini's genus which is, as far as I am aware, monotypic. The type material is on *Saccharum officinarum*, collected by Spegazzini in March 1905 from Argentina. The original packet carries notes and drawings in pencil by Spegazzini himself and from a study of the material I find that his drawings and notes are essentially correct.

There is still enough material on the specimen in good condition and sufficient for study. The colonies are black, powdery, and up to 3 mm. long and 1.5 mm. wide. The colonies consist of dense aggregations of conidiophores bearing conidia. The conidiophores are simple and each conidiophore bears along almost its entire length and all around itself dense masses of conidia which form a long, cylindrical head; indeed, the resemblance to an inflorescence of *Typha* is so striking that the generic name *Microtypha* seems most appropriate. The cylindrical head of conidia is black and almost opaque, of variable length (being slightly shorter than the conidiophore) and  $18-22 \mu$  wide. Careful examination of the specimen showed that the conidiophores arise laterally or terminally from cells of repent hyphæ which are subhyaline and septate. The conidiophores are

erect, straight, bent or subcircinate, simple, subhyaline, cylindrical and somewhat of uniform thickness throughout,  $125\text{--}210\ \mu$  long,  $4\text{--}5\ \mu$  wide, and provided with characteristic conspicuous dark septa which are usually  $2\text{--}9\ \mu$  apart. The lowermost part of the conidiophore is usually naked up to a length of about  $20\ \mu$  or less. The conidia are produced pleurogenously and singly from all round the subhyaline cells of the conidiophore; they arise as short and minute, hyaline pegs which later develop into conidia and these conidia, when mature, appear sessile. The conidia produced in the lower portion of the "fertile spike" appear to be the youngest; in this region conidia in different stages of development were seen. The mature conidia are dark brown, one-celled, smooth, broadly fusiform to ellipsoidal and  $5.6\text{--}7.0 \times 3.5\text{--}4.2\ \mu$ . Apically, the conidiophore terminates in a single conidium or a short chain of two to three conidia which are somewhat globose or subglobose or obpyriform, brown in colour, minutely verrucose and  $5\text{--}6 \times 4\text{--}5\ \mu$  in size. Indeed, some conidia produced pleurogenously on the apical cell are similarly verrucose and so differ from the normal smooth conidia produced elsewhere on the conidiophore.

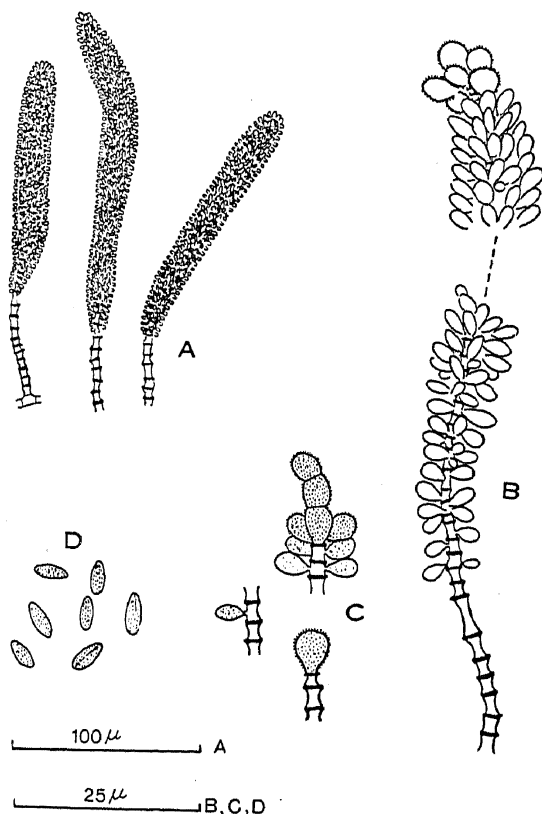


FIG. 1. *Arthrinium spgazzinii* (= *Microtypha saccharicola*), from type specimen, Herb. M.U.B.L. No. 1613. A, conidiophores with conidia; B, same magnified; C, showing production of pleurogenous and apical conidia; D, conidia.

It will be obvious from the above description and Fig. 1 that the fungus is a typical *Arthrinium*, being congeneric with *A. caricicola* Kunze ex Fries. Notwithstanding the appropriateness of Spegazzini's generic name for the fungus, *Microtypha* should accordingly be considered a synonym of *Arthrinium* Kunze ex Fries (1832).

Regarding the correct name for Spegazzini's fungus, a new combination in *Arthrinium* with Spegazzini's epithet *saccharicola* cannot be made, since the resulting combination would, if proposed, become a later homonym of *A. saccharicola* Stevens apud Johnston and Stevenson, 1917, in *J. Dept. Agric. Puerto Rico*, 1: 223 (Saccardo, 1931, p. 771). I have not examined type material of *A. saccharicola*, a species which I find omitted from Cooke's (Cooke, 1954) recent treatment of the genus *Arthrinium*; but, judging from the description, Spegazzini's fungus appears to be different for which a new name is, therefore, proposed hereunder:

***Arthrinium spegazzinii* Subramanian nom. nov.**

≡ *Microtypha saccharicola* Speg., 1911 non *Arthrinium saccharicola* Stevens, 1917.

*Type specimen*: on *Saccharum officinarum*, Jujuy, Ledesma, III-1905, leg. C. Spegazzini, ex Colecciones Micologicas, Museo-Instituto Spegazzini, Universidad de La Plata, No. 15883 (Herb. M.U.B.L. No. 1613—slide).

#### SUMMARY

A study of the type specimen of *Microtypha saccharicola* Speg., the type and the only species of the genus *Microtypha* Speg. (1911) has shown that it is congeneric with *Arthrinium caricicola* Kunze ex Fries. *Microtypha* is accordingly reduced to synonymy with *Arthrinium* Kunze ex Fr. (1832). Regarding the correct name for Spegazzini's fungus, a new combination in *Arthrinium* with Spegazzini's specific epithet *saccharicola* cannot be made, since such a combination, if proposed, would become a later homonym of *A. saccharicola* Stevens (1917) which appears different from Spegazzini's fungus. *Microtypha saccharicola* is, therefore, classified in *Arthrinium* as *A. spegazzinii* nom. nov.

I am deeply indebted to Dr. J. C. Lindquist of the Museo-Instituto Spegazzini, Universidad Nacional de La Plata, Argentina, for kindly sending me on loan for study type material of *Microtypha saccharicola*.

#### REFERENCES

- Cooke, W. B. .. "The genus *Arthrinium*," *Mycologia*, 1954, 46, 815-22.  
 Saccardo, P. A. .. *Sylloge Fungorum*, lithoprinted by Edwards Brothers, Ann Arbor, Michigan, 1913, 22, 1612 pp.  
 ————— .. *Ibid.*, 1931, 25, 1093 pp.