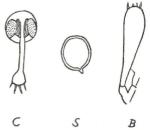
## New genera of fungi. XI1) - Endolepiotula.

Rolf Singer, Buenos Aires.

With 1 Textfig.

A fungus from the province of Mendoza, Argentina, was received from Dr. Ruiz Leal, and was at first put aside as a juvenile form of some agaric, but a more detailed examination showed that the lamellae were covered by a completely mature sporulating hymenium even in the smallest specimens, and all specimens had the hymenophore covered by a thick veil-like membrana which apparently never separated around the margin of the "pileus". This means that the collec-



Endolepiotula ruizlealii — C = carpophore,  $\times 2$ . — B = basidium,  $\times 1100$ . — S = Spore,  $\times 2000$ .

tion is actually secotiaceous, differing from *Endoptychum* in the small long-stipitate carpophores with well formed lamellae, the absence of any pulverulence (at least in the stage of development represented by the collection at hand).

Endolepiotula ruizlealii gen. nov., spec. nov., diagnosis generico-specifica: Gastrocarpio aut subgloboso aut globoso; peridio sicco vel subsicco, ad apicem carnoso, ad latera tenui; velo marginem inferiorem gastrocarpii cum stipite-columella connectante, crasso, albo, apparenter haud disrumpente; gleba brunneola, lamelliformi, a columella libera; stipite quam columella longiore, radicellis rhizomorphicis albis ornato. — Sporis stramineis, levibus, axialiter asymmetricis, pseudo-

<sup>1)</sup> Earlier contributions under this title have been published as follows: I. Mycologia 38: 358-368. 1944. — II. Lloydia 8: 139—144. 1945. — III. Mycologia 39: 77-89. 1947. — IV. Mycologia 40: 262-264. 1948. — V. Mycologia 43: 598-604. 1951. — VI. Lilloa 32: 255-258. 1951. — VII. Mycologia 48: 719—727. 1956. — VIII. Persoonia: — 1963. — IX. Lloydia 21: 45-47. 1958. — X. Sydowia 11: 320-322. 1957 (publ. 1958).

amyloideis, crassitunicatis, poro destitutis, breviter ellipsoideis, subparvis; basidiis tetrasporis, clavatis, sterigmatibus subcurvulis parvulis; cystidiis nullis; tramate hymenophorali regulari vel subregulari, ex hyphis filamentosis efformato; epicute peridii ex hyphis filamentosis cutem efformantibus consistente. — In arenosis, Argentina, Mendoza, Santa Rosa, Las Catitas, Martio mense legit A. Ruiz Leal et in herbario suo typus conservatus est, no. 7. 616.

Endolepiotula ruizlealii gen. nov., spec. nov.

Gastrocarp  $5-7\times3.5-5$  mm subglobose, vesiculose-globose, most slightly broader than high, quite obtuse, not gelatinized anywhere with a rather acute margin pointing downwards and located at some distance from the stipe-collumella, this distance filled by a white veillike membrane which is thick, somewhat convex below, dry, slightly descending on the stipe, completely enclosing the gleba, but free from glebal tissue; peridium buffish brown when dry, somewhat uneven, dry, glabrous; columella white, equal, free from the gleba, as broad as the stipe, but shorter. — Stipe white, equal above but bulbous below, glabrous, solid, dry; stipe + columella 12-18×1-2 mm., bulb 5-7 mm, broad: volva none: rhizomorphs at the base white, short root-like. — Gleba in form of well radial differentiated lamellae which are free at the edges, rather acute at the margin, free or subfree above, brownish, crowded, rather broad (about 1 mm.), somewhat thickish, edge not discolorous, obtuse or longitudinally sulcatecanaliculate when dried, consistency not gelatinous, not seen to become pulverulent or to form a spore deposit. — Context of peridium white, rather thick above, rather narrow to membranous on the sides, of the stipe-columella continuous and homogenous with that of the peridium, not showing any differentiated zones, not gelatinized, but original consistency (fleshy-soft or toughish) not known; odor and taste not observed.

Spores 5,8 $-7,2\times3,3-6,3$   $\mu$ , numerous in the enclosed gleba, many distinctly pseudoamyloid, thick-walled (wall about 0,5-0,6  $\mu$  thick in mature spores), smooth, with simple wall, without germ pore or callus, with eccentric short hilar appendage, short-ellipsoid, not lentiform. — Hymenium: Basidia  $21-22(28)\times6-7,7$   $\mu$ , 4-spored, clavate, hyaline, with small half-sickle-shaped sterigmata; cystidia none. — Hyphae hyaline, without clamp connections, hymenophoral trama regular to subregular, its hyphae filamentous, all hyphae inamyloid. — Cortical layer of peridium — a cutis, formed by filamentous repent hyphae which are hyaline to pale ochraceous.

On sandy soil (in "arenales") in subxerophytic conditions after the rains abundantly fruiting but not concrescent. Argentina: Mendoza: Dpto. Santa Rosa, Las Catitas, 10. III. 1941, leg. A. Ruiz Leal no. 7.616 (Herb. Ruiz Leal; fragments of type at Buenos Aires and MICH).

The exact position and affinity with other secotiaceous fungi is difficult to establish because we are not quite certain about the presence or absence of pulverulence in old specimens inasmuch as the spores in mass are rather light colored, but it would appear that the pseudoamyloid spores and the evident relationship with agaricaceous representatives of the Agaricales would tend to place Endolepiotula within the Secotiaceae sensu str., a position which seems appropriate also in view of the absence of a germ pore (the combination of pseudoamyloid spores and absence of a germ pore and callus seems to be restricted to this family!), the subxerophytic habitat, the free lamellae, the white rhizomorph and the absence of clamp connections. The well-formed lamellae, the agaricoid sterigmata, the strongly developed stipe, and the veil-like clearly differentiated lower portion of the peridium as well as the clear affinity to definite groups within the family Agaricaceae would suggest, furthermore, that we have to deal with a genus and species which has reached the level of Macowanites, Galeropsis, Brauniellula, Gastroboletus, i. e. it is only one step off the agaricoid level which would have been reached if there were a spore projection off a free hymenophore.

The affinities within the Agaricaceae appear to be rather obvious. If agaricoid, this could be compared with Höhnel's Micropsalliota, a genus we consider inseparable from Lepiota at the present time, and — somewhat more removed — with Pseudobaeospora. For this reason, we have proposed the generic name Endolepiotula. Dr. A. H. Smith and Dr. J. E. Wright who have seen specimens, have come to a similar conclusion as to their affinities.

## **ZOBODAT - www.zobodat.at**

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Sydowia

Jahr/Year: 1962/1963

Band/Volume: 16

Autor(en)/Author(s): Singer Rolf

Artikel/Article: New genera of fungi. XI - Endolepiotula. 260-262