

PHOTOGRAPHS AND DESCRIPTIONS OF CUP-FUNGI—XXIV. CHLOROCIBORIA

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(WITH 2 FIGURES)

The writer is proposing the above new name to replace *Chlorosplenium* as ordinarily used and for the following reasons:

Fries proposed the name *Chlorosplenium* based on *Chlorosplenium Schweinitzii* (*Peziza chlora* Schw.), a very small sessile cup-fungus of a lemon-yellow color externally and with an olive-green hymenium. The species is very common on hard wood throughout North America. Later DeNotaris, although he had never seen the type species, took up the name *Chlorosplenium* of Fries and added *Chlorosplenium aeruginosum* and *Chlorosplenium versiforme*. The former species has come to be looked upon as the typical *Chlorosplenium* although Fries did not regard it as congeneric with *Chlorosplenium Schweinitzii* when the genus was established but left it in the genus *Helotium*. Clements and Shear designate *Chlorosplenium aeruginosum* the type of the genus, giving Fries credit for the combination although, so far as we know, Fries never treated this species as a *Chlorosplenium*.

Nannfeldt recognized the fact that *Chlorosplenium Schweinitzii* and *Chlorosplenium aeruginosum* are not congeneric and suggests that the latter be kept in the genus *Ciboria*. Believing, however, that these forms are sufficiently distinct, the writer proposes that they be treated under the new name indicated below.

The following is the writer's conception of the genus *Chlorociboria* and some of the forms which should be included therein. The form on spruce cones collected by Dr. Baxter in Michigan is of unusual interest since it seems to be the first record from America.

1. *Chlorociboria* nom. nov.

Chlorosplenium DeNot. Comm. Critt. Ital. 1: 376. 1864, not Fries 1849.

Apothecia stipitate or substipitate, reaching a diameter of 1 cm. or rarely as large as 2 cm., the stem usually about half as long as

the diameter of the apothecium, resembling *Ciboria* but color green or olivaceous; asci usually 8-spored; spores irregularly ellipsoid to vermiform, simple, hyaline; paraphyses slender, clavate.

Type species, *Elvela aeruginosa* Oed.

1. **Chlorociboria aeruginosa** (Oed.) Seaver, comb. nov.

Elvela aeruginosa Oed. Fl. Dan. 9: 7. 1770.

Peziza aeruginosa Pers. Obs. Myc. 1: 27. 1796.

Helotium aeruginosum Fries, Summa Veg. Scand. 355. 1849.

Chlorosplenium aeruginosum DeNot. Comm. Critt. Ital. 1: 376. 1864.

Peziza aeruginescens Nyl. Not. Fauna Fl. Fenn. 10: 42. 1869.

Chlorosplenium aeruginescens Karst. Myc. Fenn. 1: 103. 1871.

Apothecia gregarious, stipitate or sessile at first cup-shaped becoming expanded and subdiscoid with the margin slightly elevated, verdigris-green and producing a similar color in the wood on which it grows reaching a diameter of 5 mm.; hymenium plane or lighter and sometimes yellowish; stem darker scarcely exceeding in length one-half the diameter of the apothecium and about 1 mm. thick; asci clavate, reaching a length of 45–50 μ and a diameter of 3–4 μ ; spores 2-seriate or irregularly crowded narrow ellipsoid 2–2.5 \times 5–7 μ (rarely 10–120); paraphyses very slender, about 1.5 μ in diameter, scarcely enlarged above.

On dead wood.

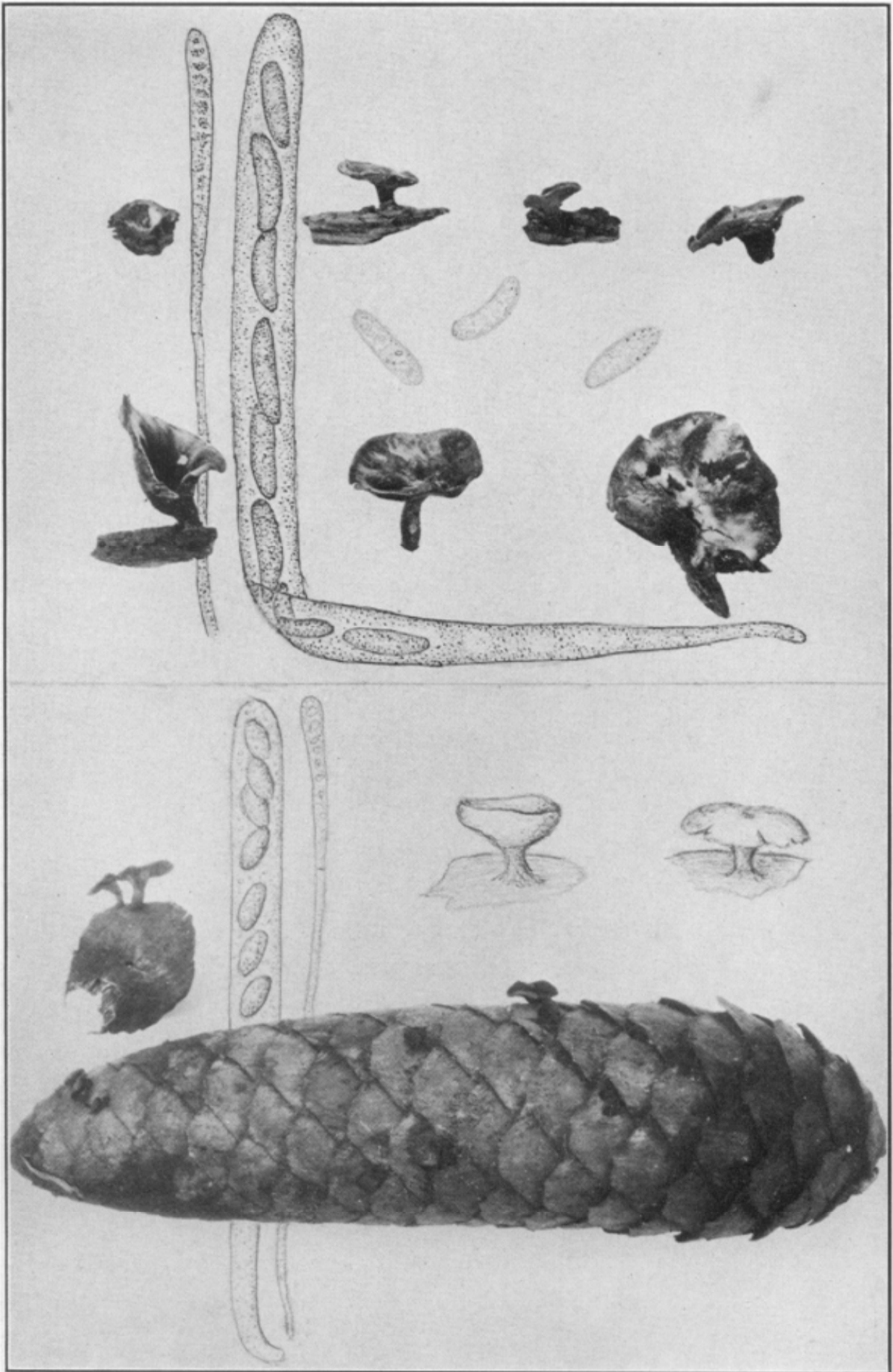
TYPE LOCALITY: Europe.

DISTRIBUTION: New York to Colorado, South to Mexico and the West Indies; also in South America, Europe, Asia, and Australia.

ILLUSTRATIONS: Boud. Ic. Myc. pl. 485; Fl. Dan. pl. 534, f. 2; Cooke, Austr. Fungi pl. 20, f. 158; Gill. Champ. Fr. pl. 88, f. 1; Grev. Scot. Crypt. Fl. pl. 241; Bull. Lab. Nat. Hist. 6: pl. 24, f. 1; Phill. Brit. Discom. pl. 5, f. 28; Rab. Krypt.-Fl. 1³: 749, f. 1–5; E. & P. Nat. Pfl. 1¹: f. 155, H–L; Masee, Brit. Fungus Fl. 4: 156, f. 41–42; Sou. Engl. Fungi pl. 347.

EXSICCATI: N. Am. Fungi 987, 2047; Rav. Fungi Cav. 5: 40.

Some European authors recognize *Chlorosplenium aeruginescens* as distinct from *Chlorosplenium aeruginosum*. The writer has been unable to detect any difference of specific importance in the material which he has examined.



UPPER FIGURE. *Chlorociboria versiformis*.
LOWER FIGURE. *Chlorociboria strobilina*.

2. **Chlorociboria versiformis** (Pers.) Seaver, comb. nov.

Peziza versiformis Pers. Ic. Descr. 25. 1798.

Chlorosplenium versiforme DeNot. Comm. Critt. Ital. 1: 376.
1864.

Helotium versiforme Berk. Outl. Brit. Fung. 372. 1860.

Coryne versiformis Rehm in Rab. Krypt.-Fl. 13: 492. 1894.

Apothecia short-stipitate becoming expanded and subdiscoid or more often elongated on one side and often becoming subveriform; entirely light green or olivaceous, reaching a diameter of 1–3 cm.; stem short, usually not exceeding 4 or 5 mm., rather stout; asci clavate, reaching a length of 100–110 μ and a diameter of 5–7 μ ; 8-spored; spores irregularly long ellipsoid straight or curved 3–4 \times 9–14 μ occasionally becoming 1-septate; paraphyses strongly enlarged above where they reach a diameter of 2–3 μ , containing a greenish coloring matter.

On decaying wood.

TYPE LOCALITY: Europe.

DISTRIBUTION: New York and Massachusetts to Iowa and south to Mexico.

ILLUSTRATIONS: Boud. Ic. Myc. pl. 486; Bull. Lab. Nat. Hist. State Univ. Iowa 6: pl. 24, f. 2; Pers. Ic. Descr. pl. 7, f. 7; Berk. Outl. Brit. Fung. pl. 2, f. 6.

EXSICCATI: N. Am. Fungi 988.

3. **Chlorociboria strobilina** (Alb. & Schw.) Seaver, comb. nov.

Peziza tuberosa strobilina Alb. & Schw. Consp. Fung. 313.
1805.

Peziza versiformis livida Alb. & Schw. Consp. Fung. 314.
1805.

Peziza Abietis strobilina Alb. & Schw. Consp. Fung. 342. 1805.

Chlorosplenium versiforme nigrescente-olivacea Weinm. Fl.
Ross. 467. 1836.

Peziza ciborioides strobilaria Nyl. Not. Fauna Fl. Fenn. 10: 36.
1869.

Cenangium strobilinum Sacc. Fung. Ital. pl. 1306. 1883.

Chlorosplenium lividum Karst. Acta Soc. Fauna Fl. Fenn. II. 6:
124. 1885.

Peziza bulgaroides Rehm in Rab. Fungi Eu. 1311; Hedwigia 9: 136. 1870.

Rutstroemia bulgaroides Karst. Myc. Fenn. 1: 105. 1871.

Ombrophila strobilina Rehm in Rab. Krypt.-Fl. 1³: 482. 1896.

Ciboria strobilina Bresadolae Boud. Ic. Myc. 4: 18. 1907.

Apothecia stipitate or sessile, at first concave, becoming expanded and subdiscoid or shallow cup-shaped, occasionally repand reaching a diameter of 1 cm. or rarely larger, brownish-black or with a slightly olive tint; hymenium similar in color to the outside of the apothecium; stem short scarcely exceeding one-half the diameter of the apothecium; slightly lacunose; asci clavate, reaching a length of 85 μ to 100 and a diameter of 5-7 μ ; spores irregularly ellipsoid 3-4 \times 7 μ .

On spruce cones.

TYPE LOCALITY: Europe.

DISTRIBUTION: Michigan; also in Europe.

ILLUSTRATIONS: Sacc. Fungi Ital. pl. 1306; Boud. Ic. Myc. pl. 480.

EXPLANATION OF FIGURES

Upper figure (1). *Chlorociboria versiformis*. Photographs of apothecia in various stages of development, about natural size; also drawings of ascus with spores and paraphysis. Photographs furnished by the Dominion National Museum, Canada.

Lower figure (2). *Chlorociboria strobilina*. Photograph of spruce cone with apothecia, about natural size; also one scale removed with apothecia. Upper right-hand corner, drawings of two apothecia, enlarged about two diameters; also drawing of ascus with spores and paraphysis. Photographed from material collected in Michigan by Dow V. Baxter.