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## CONTRIBUTION TO THE FUNGUS FLORA OF NORTHEASTERN NORTH AMERICA<sup>1</sup>

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In the following account, seven species of agarics are discussed by the senior author. *Hygrophorus purpureofolius* is described as a new species, and the new combinations *Clitocybe hudsonianus* (Jenn.) Bigelow and *Lyophyllum multiforme* (Pk.) Bigelow are proposed. Information on the three pyrenomycetes has been prepared by the junior author, and the new combinations *Anisostomula rubescens* (Ell. & Everh.) Barr and *Gnomonia acerophila* (Dearn. & House) Barr are proposed.

Acknowledgment is made to the Faculty Research Council, University of Massachusetts, for financial support of our field program during 1958 and 1959. We also wish to express our appreciation to the following for the privilege of examining type material: Dr. L. R. Hesler, Department of Botany, University of Tennessee; Dr. Clark T. Rogerson, Curator, Cryptogamic Herbarium, New York Botanical Garden; Dr. A. H. Smith, Director, Herbarium, University of Michigan; Mr. Stanley J. Smith, Senior Curator of Botany, New York State Herbarium.

Colors cited in the descriptions of agarics, except in the case of *Clitocybe hudsonianus*, are from Ridgway, R. 1912. Color standards and color nomenclature, Washington, D. C. The colors given for *Clitocybe hudsonianus* are from Villalobos-Dominguez, C. and J. Villalobos. 1947. Atlas De Los Colores, Buenos Aires.

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**Clitocybe compressipes** (Pk.) Saccardo, Syll. Fung. 5:  
184. 1887

*Agaricus compressipes* Peck, N. Y. State Mus. Rep't 33: 18. 1880.

*Omphalia graveolens* Petersen, Danske Agaricaceer, p. 137. 1907.

*Clitocybe farinacea* Murrill, N. Amer. Fl. 9: 401. 1916.

Pileus 1-3 cm. broad, convex at first with margin narrowly incurved and inrolled, disc slightly depressed at times, expanding to convex or plane, disc usually depressed, margin even, surface with thin hoary coating, becoming appressed, ground color a watery buff to brownish ("vinaceous buff", "pinkish buff", "cinnamon buff"), hygrophalous, soon fading to whitish or pale buff ("light buff", "pale ochraceous buff", "pale pinkish buff"); flesh concolorous with the pileus, thin, cartilaginous-brittle, odor and taste farinaceous.

Lamellae short decurrent to moderately decurrent, close and moderately broad in expanded specimens, sometimes narrow and subdistant when young, rarely forked, not intervenose, whitish.

Stipe 1.5-3.5 cm. long, 1-6 mm. thick at the apex, equal or either end enlarged, base usually with slight whitish tomentum, at times with a few slender rhizoids, solid, rarely eccentric, often curved, compressed at times, surface with whitish fibrillose coating, thin and soon appressed except at apex, ground color near that of moist pileus, not fading.

Spores (5-)5.5-8 x (2.5-)3-5  $\mu$  (up to 11  $\mu$  long from 2-spored basidia), elliptical or ovate, smooth, amyloid, white in mass; basidia 25-32 x 5.5-8  $\mu$ , usually 4-spored, occasionally 2-spored; filamentous cheilocystidia present, distribution variable, abundant on some lamellae, sparse or absent on others, protruding 23-62  $\mu$  beyond the edge of lamellae, 1-3  $\mu$  in diameter, smooth, hyaline; pileus tissue: surface somewhat gelatinous in KOH but not a true pellicle, cuticular hyphae cylindrical, 2.5-4  $\mu$  in diameter, sometimes with dilute yellowish or brownish intracellular pigment in KOH, trama hyaline, hyphae usually somewhat inflated, 6-16  $\mu$  in diameter, clamp connections present; gill trama regular.

Scattered to gregarious, rarely subcespitose or solitary. In the open in grass, in soil under hemlock or pine, on sandy road shoulder in mixed woods. July to October.

Material examined: *Bigelow* 6841, Amherst, Mass., July 12, 1958; 6908, Hatfield, Mass., July 16, 1958; 6947, Hawley, Mass., July 17, 1958; 7502, Leverett, Mass., Aug. 14, 1958; 7632, N. Amherst, Mass., Aug. 27, 1958; 7730, same locality, Sept. 14, 1958; 7800, same locality, Sept. 20, 1958; 8745, Leverett, Mass., Oct. 13, 1959; *C. H. Peck*, Albany, N. Y., July (type of *C. compressipes*).

*Clitocybe compressipes* is one of the group of species having smooth amyloid spores, clamp connections, and filamentous cheilocystidia, which Singer (1951) includes in the genus *Cantharellula*. *C. felleoides* Kauffman, *C. intermedia* Kauffman, *C. farinacea* Murrill, *Omphalia kalchbrenneri*

Bresadola, and *Omphalia graveolens* Petersen must be considered in a discussion of the relationships of *C. compressipes*.

There is no difficulty in separating *C. compressipes* and *C. felleoides*. The lamellae of *C. compressipes* are close and whitish, whereas in *C. felleoides* they are distant and yellowish.

*Clitocybe intermedia* I know only from my examination of the type collection and Kauffman's (1927) original description. The distinguishing characters from *C. compressipes* are: pileus "orange cinnamon", lamellae narrow and often yellowish, stipe hollow.

As described and illustrated by Bresadola (1883, 1928), *Omphalia kalchbrenneri* is also distinct from *C. compressipes*. The striate pileus, distant and long decurrent lamellae, absence of farinaceous odor and taste, long spores (8-10  $\mu$ ), are all features which are different from *C. compressipes*.

*Clitocybe farinacea* Murrill is here placed in synonymy with *C. compressipes* for my study of the type specimens of both species has not revealed any critical differences. Singer (1951) regards *C. farinacea* as a synonym of *O. kalchbrenneri*, but I do not believe this disposition is tenable. The strong farinaceous odor and taste of *C. farinacea* and spores 6-8  $\mu$  long are features of *C. compressipes* not *O. kalchbrenneri*. Singer (1951) also has placed *Omphalia graveolens* Petersen in synonymy with *O. kalchbrenneri*. However, Peterson (1907) emphasizes a distinct farinaceous odor for *O. graveolens* and spores 7-8  $\mu$  long, again features of *C. compressipes* rather than *O. kalchbrenneri*. Kühner's (1954) interpretation of *O. graveolens* is much broader than the original and seems to encompass not only *C. compressipes* and *O. kalchbrenneri* but also *C. felleoides*.

*C. compressipes* f. *autumnale* Kauffman has nonamyloid spores, 4-5  $\times$  2.5-3  $\mu$ , and is not related to *C. compressipes*. It seems likely that *C. compressipes* f. *autumnale* is within the range of *C. regularis* Peck or *C. angustissima* (Lasch) Kummer.

***Clitocybe highlandensis* Hesler and Smith, Lloydia 6:  
254. 1943**

As far as known, this is the first report of this *Clitocybe*

outside of North Carolina and Tennessee. The two collections from Massachusetts cited below have been compared with the type collection and found to be identical with it in all respects.

*C. highlandensis* belongs to the section *Disciformes* and probably should be placed near *C. harperi* Murrill because of the general aspect and the absence of clamp connections. The spores of *C. highlandensis* appear very slightly granose-roughened under an oil immersion lens, but the lack of clamp connections and a white spore deposit prevent the inclusion of this species in the genus *Lepista*.

Material examined: *Bigelow 8406*, Leverett, Mass., Aug. 11, 1959; *8554*, New Salem, Mass., Sept. 2, 1959; *Hesler and Smith 7537* (type), Highlands, N. C., Sept. 10, 1937.

***Clitocybe hudsonianus* (Jenn.) Bigelow, comb. nov.**

*Hygrophorus hudsonianus* Jennings, Mem. Carnegie Mus. pt. III (Botany), 12: 2. 1936.

Pileus 8-23 mm. broad, convex at first, disc soon becoming shallowly depressed, margin crenate and faintly pellucid-striate at times, expanding to broadly convex, finally plane or rarely broadly infundibuliform, surface glabrous or with white pubescence about the disc, somewhat waxy-appearing at times, hygrophanous, color bright orange-yellow when moist (O 18-12°, OOH 18-12°) fading very slowly to whitish (O 19-6°); flesh thin, rather brittle and cartilaginous, concolorous with surface of pileus and fading in a similar manner, odor and taste not distinctive.

Lamellae adnate at first, soon becoming short decurrent, finally moderately decurrent, subdistant, broad (3-4 mm.), waxy-appearing, near concolorous with the moist pileus but not fading, edges even.

Stipe 1.5-2 cm. long, 1.5-3 mm. broad, usually equal, base with a small amount of white tomentum, fistulose, often curved, surface white-pubescent, pallid or pale orange-yellow (OOH 18-6°, O 19-6°) beneath the pubescence.

Spores 6-8(-9) x 4-5.5(-6)  $\mu$ , usually elliptical or obovate, rarely oblong or subglobose, smooth, not amyloid, pale orange-yellow in mass (nearest OOH 19-12°); basidia 29-52 x 5.5-7(-8)  $\mu$ , usually 4-spored, rarely 2-spored, sterigmata 5-6.5  $\mu$  long; cystidia: caulocystidia present, 60-130  $\mu$  long, 5-8  $\mu$  in diameter, hyaline, walls thin and smooth; pileus tissue:  $\pm$  homogeneous, hyphae usually cylindrical, 2-8  $\mu$  in diameter, hyaline in KOH, clamp connections absent; gill trama interwoven, hyphae cylindrical, 2-5  $\mu$  in diameter.

Gregarious to subcespitose, on tundra. July and August.

Material examined: Mt. Albert, Gaspé Parc, Quebec, *Bigelow 5306*, *5307*, *5308*, *5310*, *5311*, *5312*, *5313*, *5314*, *6180*; Whiteface Mt., New York, *S. J. Smith*.

This species fruited abundantly on top of Mt. Albert in July and August of 1957. Frequently, the carpophores were growing near or intermixed with *Clitocybe umbellifera* (Fr.) Bigelow. The two species were the most abundant agarics to be found on this mountain top. Both are typical of a more northern flora, as is the other vegetation in this locality.

Emphasis has been placed upon the colored spore deposit of *C. hudsonianus* in making the transfer from *Hygrophorus*. Such a character is not uncommon in *Clitocybe*, but is decidedly atypical of *Hygrophorus*. Although the waxy-appearing lamellae of *C. hudsonianus* may indicate some intermediate relationship with *Hygrophorus*, it appears to be most closely related to such clampless species as *C. umbellifera* (Fr.) Bigelow and *C. luteovitellina* (Pilat and Nannfeldt) Bigelow.

Except for the waxy nature of the lamellae, *Clitocybe hudsonianus* is identical in appearance with *C. luteovitellina* (Pilat and Nannf.) Bigelow. They are also identical in microscopic characteristics except for spore shape and width. Those of *C. hudsonianus* are variable in shape and 4-5.5 (-6)  $\mu$  broad. *C. luteovitellina* has elliptic-oblong spores which are variously reported as: 3-4  $\mu$  broad (Moller, 1945, as *Omphalia flava*), (Pilat and Nannfeldt, 1954, as *Omphalia luteovitellina*); 3.5-4.3  $\mu$  (Favre, 1955, as *Omphalia flava*); 4-4.9  $\mu$  (M. Lange, 1955 as *Omphalina flava*); 4-5  $\mu$  (Bigelow, 1959). The similarity of these two species requires a critical observation in the field on the texture of the lamellae of *C. luteovitellina* and further study on spore variation.

***Clitocybe umbonata*** (Fr.) Konrad, Bull. Soc. Myc. Fr.  
47: 146. 1931

A pure white form of this common agaric was found Oct. 13, 1959 in Leverett, Mass. (Bigelow 8740). About twenty-five carpophores were found growing in a gregarious fashion on *Polytrichum* in an abandoned pasture. The typical form with grayish pilei was found in other groups a few yards distant. Except for the absence of pigment, the albino form had all the characteristics of *C. umbonata*.

***Hygrophorus purpureofolius*** Bigelow, sp. nov. Plate  
1253

Pileus 1-5 cm. latus, convexus demum planus, haud pellucidus, glaber,

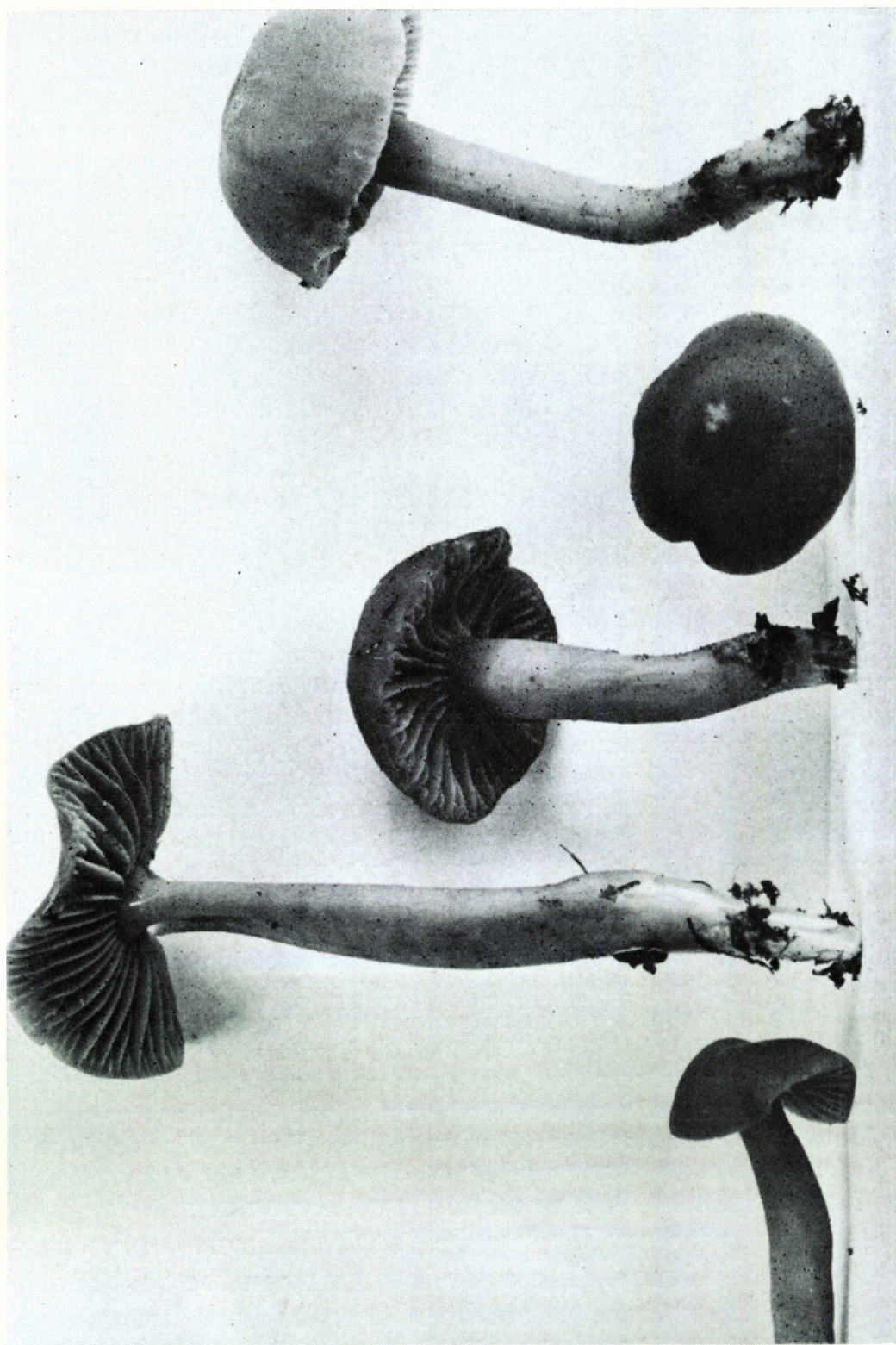


PLATE 1253. *Hygrophorus purpureofolius* sp. nov.  $\times 1\frac{1}{2}$ .

primum rubro-aurantiacus, tum aurantiacus, hygrophanus, demum flavus; lamellae adnatae vel decurrentes, confertae vel subdistantes, latae, violaceae; stipes 2.5-7 cm. longus, apice 4-9 mm. crassus, saepe compressus, cavus, glaber, pileo concolor; sporae 7-11 x 4-5.5  $\mu$ .

Specimen typicum in Herb Univ. of Mass. conservatum; legit Savoy Mt. State Forest, Mass., Aug. 7, 1959, *Bigelow 8363*.

Pileus 1-5 cm. broad, conic or campanulate at first with the margin incurved and slightly inrolled, soon convex or broadly convex, finally plane and margin often somewhat undulate, surface opaque and dull, glabrous, not viscid, moist and hygrophane, a dark reddish-orange when young ("vinaceous rufous", "Hays russet", "Kaiser brown", "Mars orange"), becoming paler and more orange when expanded ("burnt sienna", "orange rufous"), usually fading from the disc outward, radiate-streaked or squamulose in fading, becoming a rather bright yellowish-orange (nearest "deep chrome"); flesh thin, brittle, concolorous with the moist pileus at first, fading to whitish or pale yellowish, odor and taste not distinctive.

Lamellae broadly adnate to short decurrent, close to subdistant, broad (2-6 mm.), rather brittle, thick and waxy-appearing, dull lavender to purplish (nearest "pale purple drab", "pale vinaceous drab", "purple drab", "vinaceous drab", "deep dull lavender"), with a yellowish cast in age, edges even.

Stipe 2.5-7 cm. long, 4-9 mm. thick at apex, equal or enlarged at either end, ventricose at times, often compressed and with a vertical groove, usually curved or flexuous, hollow, surface glabrous, concolorous with the moist pileus and not fading appreciably, base with whitish or lilac-colored tomentum.

Spores 7-11 x 4-5.5  $\mu$ , elliptical to elliptic-oblong, at times obovate, smooth, not amyloid, spore print not obtained; basidia 42-55 x 6-8  $\mu$ , 2-spored and 4-spored; cystidia not differentiated; pileus tissue: faintly yellowish in KOH, pigment apparently intercellular and intracellular, somewhat soluble in water and KOH, cuticular hyphae cylindrical or slightly inflated, 2.5-7.5  $\mu$  in diameter, end cells often protruding, subclavate or clavate, < 10  $\mu$  in diameter, tramal hyphae mostly inflated, 7.5-14.5  $\mu$  in diameter, clamp connections present, scattered thick-walled hyphae present; gill trama subregular to regular, hyphae usually somewhat inflated, (2.5-)6-10(-12)  $\mu$  in diameter.

Gregarious to subcespitose, on leaves and humus, under birch and maple, or in a mixed woods of birch, maple, and hemlock. August.

Material examined: Savoy Mountain State Forest, Florida, Mass., *Bigelow 8361, 8362, 8363* (type), *8364, 8365, 8421, 8422, 8423*.

The purplish gills are an unusual characteristic for species in the subgenus *Hygrocybe*, to which *Hygrophorus purpleofolius* belongs. The color is striking in the field and is usually evident even after the specimens have been dried. *H. mephiticus* Peck, described from Massachusetts, has violaceous gills, but is distinctive by the yellow-brown pileus

and stipe and a mephitic odor. *H. troyanus* Murrill, described from Jamaica, also has similarly-colored gills but is a small viscid species.

***Hygrophorus tennesseensis* Smith and Hesler, Lloydia  
2: 40. 1939**

Four collections of this species were found during the fall of 1959. All were found growing in a gregarious fashion on needles under white pine. The characteristics of the carpophore checked with those of the published description by Smith and Hesler (1939). Dr. L. R. Hesler of the University of Tennessee has kindly compared some of the dried specimens with the type collection, and found complete agreement on all observable features.

The following records apparently represent the most northern occurrence of this species so far to be noted.

Material examined: *Bigelow 8616*, Chesterfield, Mass., Sept. 8, 1959; *8640*, Conway, Mass., Sept. 13, 1959; *8387*, Leverett, Mass., Oct. 4, 1959; *8731*, Shutesbury, Mass., Oct. 10, 1959.

***Lyophyllum multifforme* (Peck) Bigelow, comb. nov.**

*Clitocybe multifformis* Peck, N. Y. State Mus. Mem. 4: 141. 1900.

Pileus 2-7 cm. broad, convex at first, expanding to broadly convex or plane, broadly subumbonate at times, glabrous, dull, watery whitish with a creamy to pale yellowish tint when moist (nearest "cream buff"), margin finely pellucid-striate in expanded specimens, hygrophanous, fading to white and opaque, edge becoming brown at times; flesh moderately thick on the disc, thin on the margin, watery and concolorous with the moist pileus, fading to whitish, brittle, no odor, taste slightly acidulous.

Lamellae adnexed to adnate or short decurrent, evenly and forming a collar on the stipe apex, close, narrow, whitish (nearest "cream buff"), edges even.

Stipe 3.5-8.5 cm. long, 5-13 mm. thick at the apex, base often curved and strigose, hollow at times and compressed, surface innately fibrillose-striate, often silky and shining, white.

Spores 5.5-7.5 x 2.5-3.5 (-4)  $\mu$ , elliptical or rarely elliptic-oblong, smooth, not amyloid, white in mass; basidia 23-35 x 3-7  $\mu$ , usually 4-spored, occasionally 2-spored, aceto-carminic granules present; cystidia not differentiated; pileus tissue: surface somewhat gelatinous in KOH, cuticular hyphae cylindrical, 1.5-3.5  $\mu$  in diameter, tramal hyphae cylindrical to inflated, 3.5-11  $\mu$  in diameter, clamp connections present; gill trama subregular, hyphae usually cylindrical, 3.5-8  $\mu$  in diameter.

Gregarious to cespitose, on wood debris, under hardwoods, September and October.

Material examined: Sunderland, Mass., *Bigelow 7782, 7853, 7914*; *C. H. Peck*, Meadowdale, Albany Co., N. Y., October (type).

The pallid pileus and elliptical spores distinguish *Lyophyllum multifforme* from all species of the section *Difformia* but *L. connatum* (Fr.) Singer. In a comparison with the latter, *L. multifforme* is distinct by the hygrophanous, striate pileus and absence of an odor. *L. connatum* is shining white and with a farinaceous odor.

**Anisostomula rubescens** (Ell. & Ev.) Barr, comb. nov.

Figs. 4, 5

*Laestadia rubescens* Ellis and Everhart, North American Pyrenomycetes, p. 259. 1892.

Perithecia 100-200  $\mu$  in diameter, 80-150  $\mu$  high, depressed-globose, collapsing when dry, immersed, loosely grouped as brown dots on yellowish irregular areas of the upper leaf surface, rarely hypophyllous, wall 15-18  $\mu$  wide at sides and base, of several layers of compressed yellowish cells, at the apex dark brown or reddish brown, thickened and forming a slight clypeus by radiating dark hyphae, pore variable, 18-40  $\mu$  wide, periphysate, with light brown hyphae in leaf tissues.

Asci 45-54 x 5.5-10  $\mu$ , oblong to broadly cylindrical, apex rounded or truncate, short stalked, wall single, thin and delicate, thickened at the apex, with refractive points of projecting cytoplasm, in iodine the pore outlined in bright blue, as two globules in side view, paraphyses few, delicate, 2-3  $\mu$  wide, septate, guttulate.

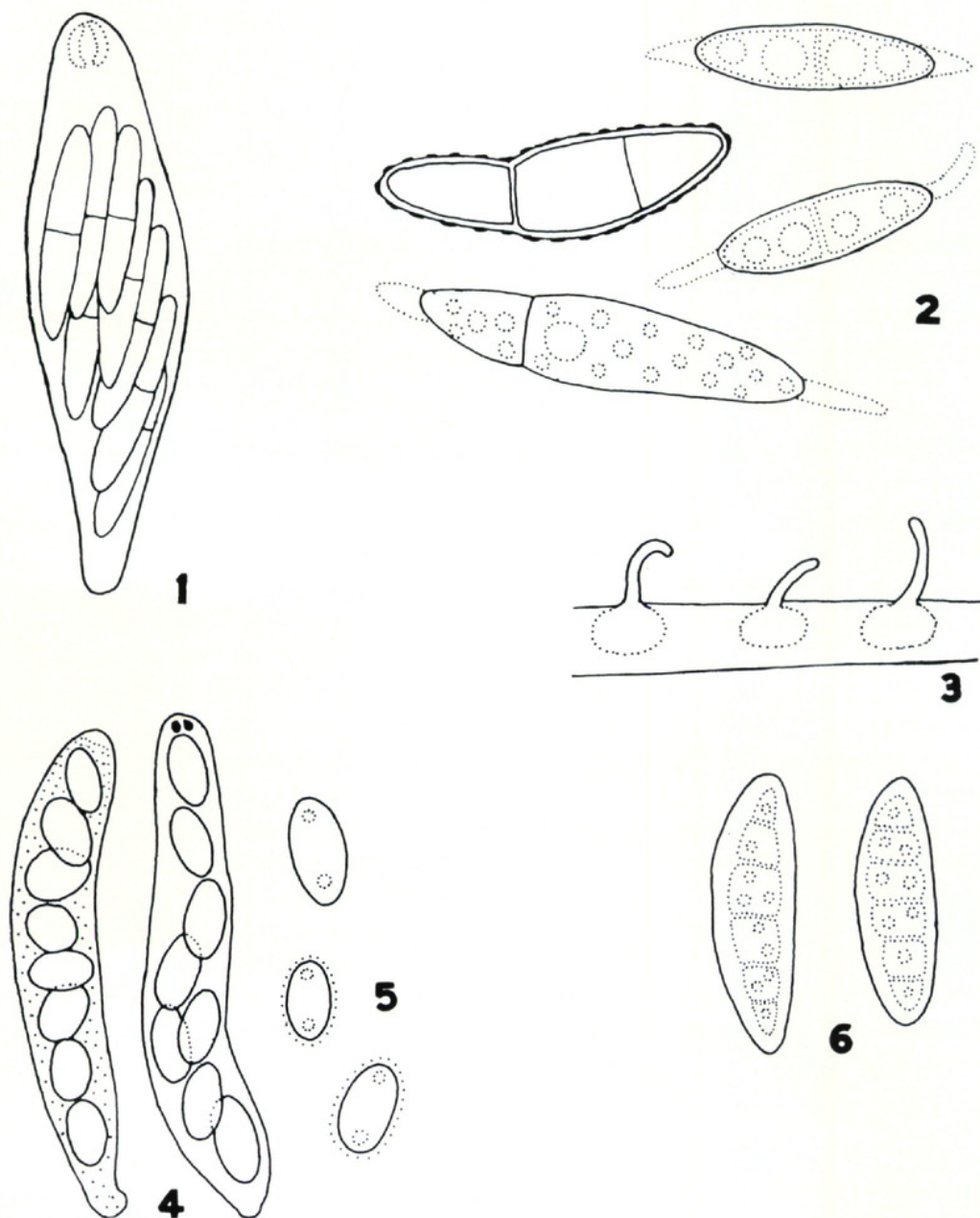
Spores 6.5-10 x 4.5-5  $\mu$ , hyaline, ovoid to ellipsoid, ends rounded to obtusely pointed, straight to inequilateral, 1-celled, wall double, smooth, often surrounded by a guttulate sheath when emerging from the ascus, contents refractive, with two globules, one near each end, obliquely uniseriate or partially overlapping biseriate in the ascus.

On overwintered leaves of *Castanea dentata*, still hanging from the branch.

Material examined: Mt. Grace State Forest, Warwick, Mass., July 28, 1959, Barr 2609; J. B. Ellis, Newfield, N. J., April 4, 1891 (type of *Laestadia rubescens*).

According to von Arx and Müller (1954), the genus *Anisostomula* includes four species, all occurring on leaves of species of *Quercus* in various regions of Europe. Both the type material of *Laestadia rubescens* and my own collection agree in all respects with the generic diagnosis. Of the previously described species of *Anisostomula*, *A. rubescens* appears to be most closely related to *A. areola* (Fckl.) von Höhnelt. *A. areola* has a similar perithecial wall, thin and light colored at the sides and darkened and clypeal around the pore. However, the spores in *A. areola* are narrower (3-4  $\mu$  wide) and are arranged biserially in the ascus.

A search of the literature produced the descriptions of three species of "Laestadia" on leaves of *Castanea*, all of which bore some resemblance to my fungus. The type specimens of *Laestadia orientalis* Ellis and Everhart (Proc. Acad. Nat. Sci. Phila. 1890: 230. 1891) and *L. castanicola* Ellis and Everhart (North American Pyrenomycetes, p. 259.



FIGS. 1-3. *Gnomonia acerophila*: 1, ascus showing refractive apex, 2, ascospores, 3, habit of perithecia in petiole. FIGS. 4, 5. *Anisostomula rubescens*: 4, two asci, that on the right in iodine to show blue-staining apical pore, 5, ascospores. FIG. 6. *Trichometasphaeria gloeospora*, two ascospores from type material of *Leptosphaeria asparagi*. Figs. 1, 2, 4, 5, 6  $\times 1500$ ; fig. 3  $\times$  ca. 20.

1892), proved to be identical. Both have a diaporthaceous structure, no beak or a very short broad one, and one-celled spores. These two collections are identical with European and North American specimens of *Sphaerognomonia carpinea* (Fr.) Potebnia on *Carpinus*. The names *L. orientalis* and *L. castanicola* are to be regarded as synonymous with *S. carpinea*. Incidentally, Miller and Thompson (1940) have already reported *S. carpinea* on leaves of a number of deciduous trees in Georgia. I have also found this species on leaves of *Quercus rubra* var. *borealis* in Massachusetts (Barr 2552 and 2560). The type specimen of *Laestadia rubescens* is identical with the material from Massachusetts. The asci and spores are somewhat larger than Ellis and Everhart (1892) gave (asci  $40 \times 6 \mu$ , spores  $5-6 \times 3.5-4 \mu$ ) in their description.

***Gnomonia acerophila* (Dearness and House) Barr, comb. nov. Figs. 1-3**

*Gnomoniopsis acerophila* Dearness and House, N. Y. State Mus. Bull. 233-234: 36. 1921.

Perithecia 420-600  $\mu$  in diameter, 350-400  $\mu$  high, immersed, depressed-globose, scattered to grouped, beaks erumpent, 300-1000  $\mu$  long (rarely up to 2 mm. long), 100-130  $\mu$  wide near base, narrowed to 60-70  $\mu$  wide near apex, central to somewhat lateral, curved, somewhat irregular, wall blackened, hyaline near apex, periphysate, perithecial wall 20-33  $\mu$  wide, of one to two layers of dark brown, large cells externally, and inner layers of compressed hyaline cells.

Asci 50-87 x 12-16.5  $\mu$ , ellipsoid, narrowed to the rounded apex and short-stalked base, wall delicate, with two elongate refractive areas at apex, no blue in iodine, aparaphysate.

Spores 16.5-33 x 4-6.5  $\mu$ , greenish hyaline, becoming yellowish in age, at times dull brown, cylindric-fusoid, ends rounded to pointed, straight to slightly curved, 1-septate in the middle or below it, not constricted, in age a second septum formed in the upper cell, appendaged at both ends, appendages hyaline, (2-) 5-9 (-11)  $\mu$  long, 1-2  $\mu$  wide, truncate or pointed, straight or curved, wall double, smooth but in iodine becoming slightly roughened or irregular, in overmature brown spores roughened with brown granules, contents with two large globules in each cell, in a fascicle in the ascus.

On petioles, overwintered, of *Acer* spp.

Material examined: *Acer pennsylvanicum*, Oneida, N. Y., May 15, 1918 (type of *Gnomoniopsis acerophila*); *Acer rubrum*, Huntington Forest, N. Y., June 29, 1957, Barr 1888A; *Acer* sp., Ste. Adele, Quebec, June 22, 1957, Barr 1864; Ellis and Everhart, North American Fungi 2139 (as *Gnomonia emarginata* Fekl.), Newfield, N. J., June, 1888.

The genus *Gnomoniopsis* (Wint.) Berlese was erected to

accommodate species of *Gnomonia* in which the spores developed more than one septum. This distinction is not sufficient to maintain a separate genus, and von Arx (1951) considers that *Gnomoniopsis* and *Gnomonia* are the same. Dearness and House (1921) described the spores of *Gnomoniopsis acerophila* as one to five septate, but the type material contains spores with one primary septum, and rarely a secondary very thin septum in the upper cell. According to the collections examined, *G. acerophila* is most closely related to *G. campylostyla* Auerwald, on leaves of *Betula*. Both species have the beak frequently crooked and irregular, varying in position from central to lateral. In both the asci are large with elongate refractive areas at the apex. The spores of *G. campylostyla*, from material which I have collected, measure  $18-25.5 \times 3 \mu$ , rarely show faint appendages at the tips, and at times have two additional septa. *G. acerophila* may be separated from *G. campylostyla* by its habit on petioles, rarely extending a short distance up the midvein, its longer, stouter beak, and the broader spores with distinct appendages.

The specimens issued by Ellis and Everhart in North American Fungi 2139 as *Gnomonia emarginata* Fuckel agree in all respects with my material of *G. acerophila*. According to the literature, *G. emarginata* is confined to petioles of *Betula* spp., and has curved, one-celled, biguttulate spores, narrower than those of *G. acerophila*.

*Gnomonia acerophila* differs from the other species of *Gnomonia* reported on *Acer* in larger sizes throughout, in its long, bent beaks, and in being confined to petioles of the leaves.

**Trichometasphaeria gloeospora** (Berk. and Curr.) Holm,  
Symb. Bot. Upsalienses 14(3): 144. 1957. Fig. 6

Holm (1957) has given a detailed description and synonymy of this fungus. To the synonymy of *T. gloeospora* should be added *Leptosphaeria asparagi* Peck (N. Y. St. Mus. Rep't 40: 70. 1887). Ellis and Everhart (1892) have previously included Peck's species as the same as *Leptosphaeria comatella* (Cke. and Ell.) Saccardo. The latter is identical with *T. gloeospora*, as Holm has observed. I have studied type material of Peck's *L. asparagi*. It agrees in all

respects with Holm's description of *T. gloeospora* and with specimens of *Sphaeria comatella* issued by Ellis. The Massachusetts material of *T. gloeospora* is similar to the other material examined and to Holm's description.

Material examined: on *Asparagus* stalks, North Amherst, Mass., June 3, 1959, *Barr* 2556; *Ellis* North American Fungi 190 and 190d, Newfield, N. J. (as *Sphaeria comatella* Cke. and Ell.); Fungi Columbiana 1425a and 1425b, Newfield, N. J., (as *Leptosphaeria comatella* (Cke. and Ell.) Sacc.); on *Asparagus*, Menands, N. Y., Oct., 1886, *C. H. Peck* (type of *Leptosphaeria asparagi*).

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