

NOTEWORTHY SPECIES OF LEPIOTA AND LACTARIA

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(WITH 7 FIGURES)

The species of *Lepiota* described in this article were collected under Monterey Cypress trees (*Cupressus macrocarpa*) on Point Lobos which is located south of Carmel Bay in Monterey Co., California. My primary purpose in going to Point Lobos was to determine what species of *Russula* or *Lactaria* might be found growing in this habitat. However, throughout the season from October to May no species of either genus appeared. But there was an abundance of several species of *Lepiota* from February through April, most interesting of which were the following:

***Lepiota cupressea* sp. nov.** (FIG. 1; 6, A)

Pileus convex to plane, from 3.5 to 8 cm. broad; surface dry, minutely pruinose-downy at first becoming floccose to areolate outside the disc, warm sepia tone 1 with a livid tinge, to brownish-drab, becoming much paler over the marginal area as the cuticle breaks up; context quickly Etruscan red where wounded, as this disappears becoming raw umber, mild and sweet at first then slowly peppery, especially in the lamellae; margin white and minutely downy when young with the sterile edge projecting beyond the lamellae; lamellae white, fimbriate, staining first yellow then salmon, and finally sepia, free, somewhat remote, narrower at the inner end, appearing ventricose in mature specimens, unequal, a number forking near the inner end, broad, close; spores fleshy-white tone 1-2, ellipsoid, apiculate, uniguttulate, $7.5-9.5 \mu \times 4.5-5 \mu$; stipe white, becoming reddish where wounded than raw umber tone 1, minutely fibrous to floccose, bulbous, rather firm becoming hollow, 5 cm. to 7.5 cm. by .8 to 1.5 cm. at the apex and from 1.5 to 2.2 cm. through the bulb; annulus superior white becoming red where bruised then sepia, darker on the edge, hanging down and flaring out at first, then collapsing on the stipe, easily coming off if moved, otherwise persisting until mature.

Pileo primo convexo deinde plano, ab sepia (305 t-1) ad brunneum-rufum colorem (302) margine pallescente, sicco, primo pruinoso, deinde floccoso-areolato extra discum; carne rubente, postea umbrina (301), primo miti et dulci, deinde tarde acri; marginæ albo et subtiliter pubescente; lamellis primo albis, postea cremeis, deinde salmonicis, postremum sepiosis, remotis, inaequalibus, nonnullis ad stipitem furcatis; sporis albidulis (9 t-1 to 2), ellipsoidis, uniguttulatis, $7.5-9.5 \mu \times 4.5-5 \mu$; stipite albo, rubescente cum vul-



FIG. 1. *Lepiota cupressea* Burl. 4/5 nat. size.

neratus est, deinde umbrino, subtiliter fibrato-flocculoso, bulboso, firmo, postea cavo, 5-7.5 cm. \times .8-1.5 cm. ad apicem, 1.5-2.2 cm. ad basim; annulo supero, albo, sed cum vulneratus est rubescente, deinde fuliginoso et fusciori margine, pendulo et persistente.

Type locality: Point Lobos, California. Type 9 Mar. 15-1937.

Habitat: On the ground under Monterey cypress trees.

Distribution: At various places on Point Lobos and at Pacific Grove and on the Seventeen Mile Drive on the Monterey Peninsula.

This species differs from *Lepiota brunnescens* Peck in the change of wounds to red before becoming sepia and in the final peppery taste, bulbous stipe, and the size and shape of the spores and easily removable annulus. From *Lepiota americana* it differs in the surface covering of the pileus and the peppery taste; from

Lepiota Badhami in the larger spores and lack of odor, and the pendulous annulus.

***Lepiota marginata* sp. nov. (FIG. 2; 6, B)**

Pileus broadly convex becoming plane to slightly centrally depressed, tinted incarnate to pale reddish lilac with center brownish drab tone 1, surface minutely floccose over a white background, center remaining well covered with the cuticle, very slightly viscid when wet, 4 to 5.7 cm. broad; context white,

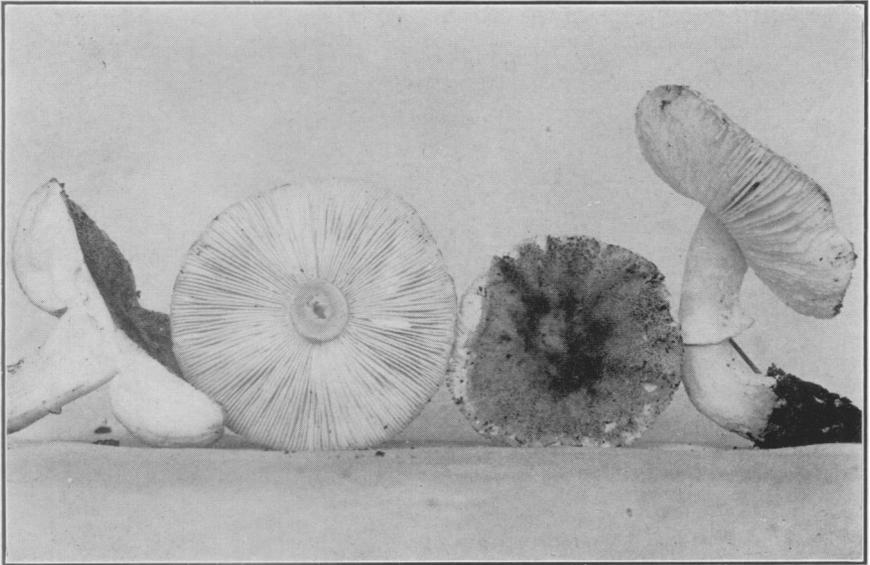


FIG. 2. *Lepiota marginata* Burl.

unchanging, taste good, odor none; lamellae white unchanging, free but not remote, broad, ventricose, minutely notched on the edge, unequal; spores white, uniguttulate, $4.3\text{--}5.3\ \mu \times 6.25\text{--}7.5\ \mu$; stipe white above the annulus, becoming snuff brown to burnt umber below the annulus, pruinose to floccose at the apex, a little enlarged below, becoming hollow, 3 to 5 cm. \times 1 cm. at the apex to 1 to 1.5 cm. through the base; annulus white with brownish drab to incarnate edge, median to slightly superior, hanging down close to the stipe with the lower edge flaring somewhat, 3 to 6 mm. broad, becoming movable and sometimes coming off.

Pileo primo late convexo, deinde plano aut in centro subdepresso, incarnato et in centro brunneo-rufo (302 t-1), minute floccoso sed centro cuticula integra velato, viscidulo cum udus est, 4-5.7 cm. lato; carne alba, immutabili, sapore

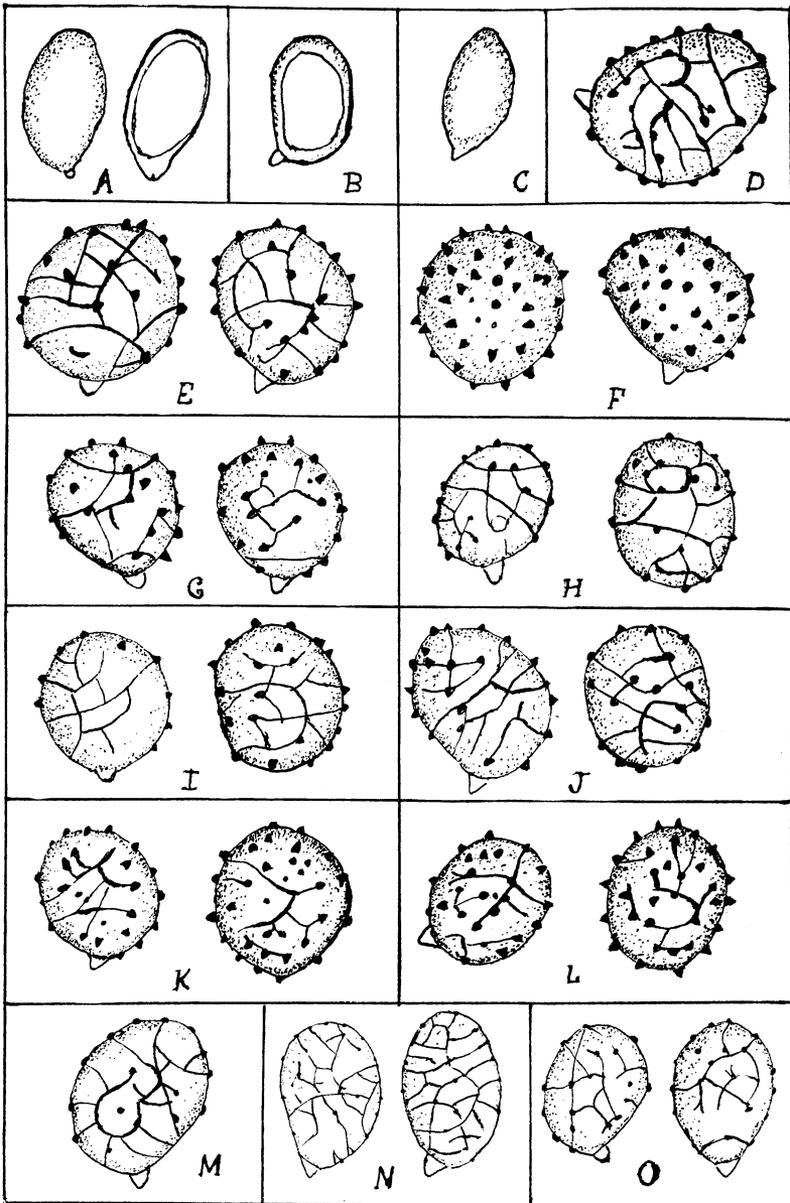


FIG. 6. Spores of A, *Lepiota cupresssea*; B, *L. marginata*; C, *L. decorata*; D, *Lactaria fumeacolor*; E, *L. Beardslei*; F, *L. flocculosiceps*; G, *L. camphorata*; H, *L. helva*; I, *L. rimosella*; J, *L. mutabilis*; K, *L. alpina*; L, *L. isabellina*; M, *L. torminosa*; N, *L. floridana*; O, *L. villosa* Clem.