

Stipe 2-6 cm long, apex 3-6 mm thick, equal or slightly enlarged at either end; pallid to watery pale buff; surface glabrous or with slight fibrillose coating which becomes appressed, stuffed then hollow, compressed at times.

Spores 7-8.5(-11) × (3.5-)4-5 μm, ellipsoid, to oblong, smooth, inamyloid, cyanophilous; deposit white. Basidia 20-28 × 6-7.5 μm, usually 4-spored, but occasionally also 1- and 2-spored basidia present. Pileus: cutis somewhat gelatinous appearing in KOH but not a separate pellicle, cutis of cylindric hyphae, 1.5-4 μm diam, rather loosely interwoven; cortex of cylindric or inflated hyphae, 4.5-16 μm diam. Hymenophoral trama of subparallel hyphae, cylindric or slightly inflated, (3-)5.5-10 (-12) μm diam. Clamp connections present.

Gregarious to subcespitose. Under conifers. Late July to October.

Material examined: *USA: Colorado*: Smith 51410, 52555, 52652, 52657, 52699, 53038 (MICH); *Idaho*: Smith 54887 (MICH); *Oregon*: Smith 24231, 28281 (MICH); *Washington*: Smith 17828, 40622 (MICH); *Wyoming*: Smith 34601, 35236 (MICH).

Extralimital: *Sweden*: Lundell n. 2863 (MICH).

The specimens cited appear to fit the concept of Fries (1836-1838) as well as that of Moser (1978) for *C. obsoleta*. They cannot represent *A. fragrans* ss. Fries, 1821, for the odor is not of anise but is fragrant and sweet instead. The odor given by Fries (1821) for *A. suaveolens* (viz. “fragrans,” “gratus”) cannot exclude *C. obsoleta* of course, but his description of the pileus of *A. suaveolens* states “album.” Possibly, *C. harmajae* Lamoure has an odor similar to *C. obsoleta*, but the former has a pinkish buff spore deposit, grows in grassy habitats, and the pileus colors are browner than those of *C. obsoleta*.

#### 44. *Clitocybe deceptiva* Bigelow, sp. nov.

Fig. 39

*Clitocybe suaveolens* (Fr.) Kummer ss. LeGal, 1944; Kühner and Romagnesi, 1953; Bigelow and Smith 1962; et auct. nonn.; non Fries, 1821.

? *Clitocybe fragrans* ss. J. Lange, 1935; non Fries, 1821.

Pileus 1-6 cm latus; primum convexus tum planus, margine striatus, discus tandem depressus non profundus, glaber, hygrophanus; diluto-murinus vel brunneolus, demum bubalinus; odore aniseo; lamellae adnatae ad subdecurrentes, confertae ad subdistantes, aliquantum latae, pallide alutaceae; stipes 2-6 cm longus, apicem 2-6 mm crassus, pileo concolor; sporae 6.5-8.5(-9) × 4-4.5 μm, in cumulo pallide incarnato-bubalinae.

Holotypus legit H. E. Bigelow, n. 1933; Papoose Creek, 7 Devil Mts., Valley Co., Idaho, USA, 2 Sept. 1954 (MICH).

Pileus 1-6 cm broad; pale gray brown (dingy “vinaceous buff,” pale “buffy brown,” pale “drab”), hygrophanous, fading to “pale pinkish buff,” at times with “pinkish buff” on the disc; convex to broadly convex at first, becoming plane with the disc soon slightly depressed, finally broadly depressed, margin somewhat elevated in age or broadly undulate in age, inrolled at times, finely striate when moist; surface glabrous; context thin, concolorous with the pileus surface. Odor of anise. Taste mild.

Lamellae pallid, then tinged with buff or light gray brown (“pinkish buff” or “light ochraceous buff”), fading; adnate to short decurrent, close to subdistant, rather broad (up to 6 mm), rarely forked, not intervenose.

Stipe 2-6 cm long, apex 2-6 mm thick; equal or tapering upward from a slightly enlarged base; concolorous with the moist pileus; stuffed, becoming hollow, terete or somewhat compressed in age, usually curved, surface shining and silky at first, fibrillose striate on fading, glabrous appearing when wet.

Spores 6.5-8.5(-9) × 4-4.5 μm, ellipsoid, smooth, inamyloid, cyanophilous; deposit “pale pinkish buff.” Basidia 23-33 × 5-8 μm, 4-spored. Pileus: cutis of cylindric hyphae, 1.5-3.5 μm diam; context of cylindric or inflated hyphae, 2.5-16 μm diam. Hymenophoral trama of undulate-subparallel hyphae, cylindric to inflated, 2-11(-20) μm diam. Clamp connections present.

Gregarious. Under conifers. Most frequently in September and October (in December in northern California).

Material examined: *USA: California:* Bigelow 18667 (MASS); *Colorado:* Smith 52338 (MICH); *Idaho:* Bigelow 1678, 1679, 1680, 1874, 1933 (holotype), 1946 (MICH); *Oregon:* Smith 19352 (MICH); *Washington:* Bigelow 2290, 2326, 2354, 2361 (MICH).

Extralimital: *Switzerland:* Bigelow 17741 (MASS).

*Clitocybe suaveolens* in the interpretation of several modern workers including myself (Bigelow and Smith, 1962) can not be *A. suaveolens* ss. Fries, 1821, as he specifies that the pileus is “albus” and “odore et sapore gratus”. Fries knew the anise odor well and specified anise in the description of *A. fragrans* (1821, 1874) and his 1874 version of *A. suaveolens*. There are a couple of other changes between the 1821 and 1874 descriptions of *A. suaveolens*, and I think it quite possible that Fries had a different taxon in 1874 than 1821. The pileus color is altered from “albus” to “albidis, siccus omnino albus,” “discoque obscuriore insuper diversis.” The shape of the pileus is modified from “convexo—raro depressus, nec vere umbilicatus” to “e convexo-umbilicate depresso subinfundibuliformi.” Unfortunately, the differences could also be the results of his observations on older basidiocarps of the same species, but this can never be determined. It is certain though that the fungus here named *C. deceptiva* is not the agaric Fries described as *A. suaveolens* in 1821. In most field characters, *C. deceptiva* is like *C. harmajae* Lamoure (= *C. fragrans* ss. Harmaja), but the two at least differ noticeably by odor and taste.

*Clitocybe fragrans* (n. 45) and *C. obsoleta* (n. 43) should also be compared. *Clitocybe deceptiva* is illustrated in Fig. 39, but the pilei have faded almost entirely.

45. **Clitocybe fragrans** (Fries) Kummer, *Der Führer in die Pilzkunde*, p. 121. 1871.

*Agaricus fragrans* Fries, *Syst. Mycol.* 1: 171. 1821.

Pileus 1.5-4.5 cm broad; watery whitish to faintly yellowish, disc sometimes darker



Fig. 39. *C. deceptiva*, Bigelow 1933, X 1.