

**Draft description of the type of *A. pekeoides* and of material of the two taxa that have been called varieties or variants of that species**

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*AMANITA PEKEOIDES* G. S. Ridl. 1992. *Austral. Syst. Bot.* 4: 333, fig. 4(a-h).

Figs. ??

**PILEUS:** 32 - 82 mm wide, hazel to dark grayish sepia, paling to grayish sepia at margin, with sulcate ridges concolorous with disc, with furrows pale grayish sepia or vinaceous buff, convex to plano-convex, then plano-depressed, slightly viscid when wet, quickly drying; *context* white, with pale brown vinaceous to pale sepia region below pileipellis in disc; *margin* sulcate (0.17 - 0.31R), entire, occasionally splitting along furrows; *universal veil* absent

**LAMELLAE:** free, crowded, pale buff to buff when fresh, orangish brown in exsiccata (lacking gray tint), 6 - 10 mm broad, with entire pallid edge; *lamellulae* truncate. [The fact that the lamellae are not marginate (contrary to the protologue) was kindly confirmed by Dr. Ridley (pers. corresp.).]

**STIPE:** 70 - 120 × 7 - 10 (-17) mm, pale grayish sepia, decorated with hazel to grayish sepia striate bands (becoming finer and more numerous toward apex), narrowing upward; *context* white, hollow, with central cylinder diameter about one-half to one-third of stipe diameter; *exannulate*; *universal veil* as saccate volva, fleshy when young, membranous in age, 1 - 3 mm thick, 30 - 58 mm high, usually bilabiate, buff with ochraceous to fulvous stains, attached only at stipe base, with *limbus internus* small and placed one-fifth to one-quarter of way up volval limb.

*Odor* and *taste* not recorded.

**MACROCHEMICAL TESTS:** none recorded.

**PILEIPELLIS:** 70 - 100 μm thick, orange-brown in 3% KOH, gelatinized only at surface; filamentous, undifferentiated hyphae 1.0 - 6.0 μm wide, branching, dominantly subradially arranged, densely packed; vascular hyphae not observed. **PILEUS CONTEXT:** filamentous, undifferentiated hyphae 3.5 - 10.0 μm wide, branching, in fascicles or singly, interweaving in loose lattice structure, occasionally having partially inflated intercalary segments, sometimes with yellowish subrefractive walls (locally common); acrophysalides narrowly clavate to clavate to broadly clavate to irregularly clavate to pyriform, up to 75 × 30 μm, common to plentiful, thin-walled; vascular hyphae 2.5 - 15.5 μm wide, sinuous, rather common to locally plentiful, locally frequently branching or forming loosely tangles. **LAMELLA TRAMA:** bilateral;  $w_{cs} = 80 - 105 \mu\text{m}$  (excellent rehydration, Ridley 18); subhymenial base comprising frequently branching hyphae (plentiful) and inflated cells (subglobose to ellipsoid to ovoid to obclavate, up to 29 × 16.2 μm); filamentous, undifferentiated hyphae 1.8 - 5.6 μm wide, branching, infrequently with yellowish walls, apparently without partially inflated intercalary segments in central stratum; terminal, divergent inflated cells not observed; vascular hyphae not observed. **SUBHYMENIUM:**  $w_{st\text{-near}} = 35 - 50 \mu\text{m}$  (excellent rehydration, but not completely mature, Ridley 18), = 65 - 70 μm in mature but damaged tissues (McNabb s.n.);  $w_{st\text{-far}} = 80 - 95 \mu\text{m}$  (excellent rehydration, but not completely mature, Ridley 18), = 90 - 100 μm in mature but damaged tissues (McNabb s.n.); in immature regions of hymenium, comprising frequently branching short segmented interwoven hyphae, sometimes with one or two segments immediately below basidia slightly inflated; in mature regions of hymenium, dominated by small inflated and partially inflated cells (up to 21 × 13.2 μm, but mostly under 10 × 10 μm) in up to three layers below bases of longer basidia/oles and short hyphal segments (perpendicular to central stratum), pseudoparenchymatous in some regions, but branching structure usually apparent, with one to three cells between bases of longest and shortest basidia/oles in small region, with basidia arising from both inflated cells and (occasionally) from uninflated or partially inflated hyphal segments. **BASIDIA:** 47 - 84 × 12.6 - 18.2 μm, dominantly 4-sterigmate, occasionally 2- or 1-sterigmate, with sterigmata up to 8.8 × 3.2 μm; clamps not observed. **UNIVERSAL VEIL:** On pileus: absent or as scarce gelatinized fragments of inner surface of volval limb. On stipe base, exterior surface: comprising often thick fascicles of filamentous, undifferentiated hyphae and single hyphae interwoven, with fascicles rather distant from each other giving clear view of interior tissue between them, with outermost fascicles partially to strongly gelatinized and sordid to brown to orange, with many large outer fascicles sublongitudinally oriented, but with others occurring at nearly any angle; filamentous, undifferentiated hyphae 1.4 - 10.2 μm wide, branching, dominating, sometimes with yellowish subrefractive walls, often in fascicles up to 15 or more hyphal diameters across, with walls thin or slightly thickened; vascular hyphae 3.8 - 4.9 μm wide, scattered, infrequent. On stipe base, interior: filamentous, undifferentiated hyphae 2.8 - 14.5 μm wide, branching, dominating, sometimes coiled in broad curves, in fascicles (as broad as those on exterior surface) and singly, with walls thin to slightly thickened, often constricted at septa; inflated cells up to 53 × 27 μm (most under 30 × 20 μm), thin-walled, ovoid to clavate to narrowly clavate, terminal singly, scattered, rather scarce; vascular hyphae not observed. On stipe base, inner surface: orange-brown, thin layer of gelatinized elements like those in interior or (in some areas) closely packed, longitudinally oriented, filamentous, undifferentiated hyphae. **STIPE CONTEXT:** longitudinally acrophysalidic; filamentous, undifferentiated hyphae 3.5 - 9.1 μm wide, branching, plentiful to dominant; acrophysalides thin-walled, plentiful, rather narrow, up to 328<sup>+</sup> × 34 μm, with many greater than 200 μm long; vascular hyphae 3.5 - 10.8 μm

wide, branching, sinuous, scattered, but not uncommon. TISSUE ON GILL EDGE: colorless,  $60^{\pm}$   $\mu\text{m}$  thick, partially gelatinized, even before beginning sporulation becoming dominated by subradially arranged closely packed filamentous, undifferentiated hyphae, with inflated cells (up to  $47 \times 30 \mu\text{m}$  or more) originally in up to 3 or more layers.

BASIDIOSPORES: [200/10/7] (8.4-) 10.2 - 13.5 (-17.5)  $\times$  (7.5-) 9.5 - 12.6 (-17.0)  $\mu\text{m}$ , (**L** = (10.9-) 11.5 - 12.8  $\mu\text{m}$ ; **L'** = 12.0  $\mu\text{m}$ ; **W** = (10.0-) 10.2 - 11.8  $\mu\text{m}$ ; **W'** = 11.1  $\mu\text{m}$ ; **Q** = (1.03-) 1.04 - 1.15 (-1.58); **Q** = 1.06 - 1.10 (-1.13); **Q'** = 1.09), hyaline, colorless, thin-walled, smooth, inamyloid, globose to subglobose to broadly ellipsoid, rarely ellipsoid or broadly langeniform, at least somewhat adaxially flattened, sometimes expanded at one end; apiculus sublateral, cylindrical, prominent; contents dominantly monoguttulate, occasionally multiguttulate or granular; white in deposit.

*Habitat and distribution*: Solitary to subgregarious to gregarious. Under *Nothofagus menziesii* (Hook. f.) Oerst. and *N. fusca* (Hook. f.) Oerst. (PDD 56143) or under *N. truncata* (Col.) Ckn. (PDD 56141, PDD 56142, PDD 56146) or under *N. solandri* (Hook. f.) Oerst. var. *solandri* or *N. solandri* var. *clifortioides* (Hook. f.) Poole. Paratypes not reviewed were collected under *Lepidospermum scoparium* Forster & Forster f. [Segedin 206 (PDD)] and under *Kunzea ericoides* (A. Rich.) J. Thompson [Stevenson 83/153 (CHR)]. Information concerning the habitat of specific collections was provided to me by Dr. Ridley (pers. corresp.).

*Collections examined*: **NEW ZEALAND**: CANTERBURY—Ashley Gorge, 3.iii.1968 R. F. McNabb *s.n.* (paratype, PDD 31227). NELSON—Denniston - Denniston Walkway, 25.i.1987 L. D. Milicich *s.n.* [G. S. Ridley 284] (paratype, PDD 56143). WELLINGTON—Eastbourne - Muritai Pk., 29.iii.1958 M. Bulmer *s.n.* [G. Stevenson 1271A] (paratype, K 36095). Lower Hutt - Taita, 18.iii.1958 G. Stevenson 1270 (paratype, K 36092). Rimutaka For. Pk. - Orongorongo Track, 28.iii.1986 G. S. Ridley 18 (paratype, PDD 56142); Orongorongo Valley, Paua Ridge, 19.iii.1986, G. S. Ridley 13 (paratype, PDD 56141), 1.iv.1987 G. S. Ridley 374 (holotype, PDD 56146). Southern Wairarapa - Wairongomai Stn., 27.vii.1949 G. Stevenson 735 (paratype, K 36088).

DISCUSSION: Of the taxa studied to date, *A. pekeoides* has the greatest similarity to *A. humboldtii* Singer described from under *Quercus humboldtii* Bonpl. in Andean Colombia (Tulloss *et al.* 1992). The present taxon differs from *A. humboldtii* in having

- lamellae not marginate
- fewer cells in the subhymenium below the longest basidia/oles
- vascular hyphae absent or certainly not common in pileipellis
- pileipellis twice as thick as in *A. humboldtii*
- interior of limb of universal veil having notably fewer inflated cells.

*Amanita arctica* differs from the present taxon by its??

- white to pallid pileus
- presence of acrophysalides with walls up to 0.8  $\mu\text{m}$  thick in contexts of both pileus and stipe
- notably greater number of inflated cells in the interior of the universal veil
- presence of inflated cells with walls up to 0.8  $\mu\text{m}$  thick in the interior of the universal veil
- subarctic affinities.

Ridley 18 is immature and no spores were found on its lamellae; however, its macroscopic characters and anatomy clearly place it in *A. pekeoides*.

The McNabb collection has become rather damaged by mold; however, there are still sections of lamellae that are sufficiently well preserved so that the parameters of the mature subhymenial tree can be measured from them as well as from any of the specimens examined. The spores of the collection are undamaged.

Paratype materials deposited in K could not be located.

In the protologue of the present species, Ridley distinguished two sets of “individuals” having what he considered to be minimal macroscopic differences from the set of specimens from which the above description was derived. He explicitly includes these other specimens within the species although each of the two sets is described separately. One set is called “individuals with friable volva”; the other, “white individuals.” These paratypes were examined with the following results:

### 1. “Individuals with Friable Volva.”

Note: Portions of the following macroscopic description in square brackets are taken from notes on a paratype that I have not reviewed [New Zealand, Nelson Lakes Nat. Pk., Rotoiti, 5.iii.1955 G. Stevenson 969 (K)]. These notes were taken by Dr. Ridley and kindly provided by him.

PILEUS: 31 - [70] mm wide in exsiccata, dark brown to grayish brown; *margin* pectinate (0.25R - 0.35R in exsiccata), nonappentidulate; *universal veil* absent or as numerous, confluent, friable, patches (PDD 32108, specimen B), grayish sepia to dark grayish sepia fresh, reddish brown in exsiccata.

LAMELLAE: [free, moderately crowded,] white, with grayish tones in exsiccata, marginate (with margin brown vinaceous to dark grayish sepia) and with dark edge easily seen in exsiccata; *lamellulae* not described, absent in those portions of exsiccata where observation possible (PDD 32108, specimen A), but “intercalaries” mentioned in Dr. Ridley’s notes on Stevenson 969.

STIPE: up to  $118 \times 5$  mm in exsiccata, dark brown, in exsiccata dark brown in upper two thirds and paler reddish brown in lower third (above remains of universal veil), narrowing upward[, sometimes with point on base]; *exannulate*; *universal veil* as incom-

plete ring or very short limb less than 10 mm from stipe base (PDD 31276), apparently white or quite pallid at first, becoming grayish sepia to dark grayish sepia [to sepia gray] except at very base of stipe and there remaining pallid [or becoming mouse gray] in exsiccata, occasionally also deposited in small patch (e.g., 6.5 × 2.5 mm in exsiccatum of PDD 31276) slightly higher on stipe than ring/limb cited.

*Odor and taste* not recorded.

MACROCHEMICAL TESTS: none recorded.

PILEPELLIS: 70 - 110 µm thick, gelatinizing only at surface or to depth of less than 10 µm, with upper most 10 - 15 µm colorless, with remainder orange-brown to red-brown; filamentous, undifferentiated hyphae 2.8 - 7.0 µm wide, branching, dominantly subradially arranged, occasionally at other angles, closely packed; vascular hyphae 4.8 - 18.2 µm wide, branching, sinuous, common, locally plentiful, locally tangled. PILEUS CONTEXT: filamentous, undifferentiated hyphae 2.5 - 5.5 µm wide, branching, common to plentiful, singly and in fascicles, interwoven in very sparse lattice; acrophysalides dominating, thin-walled, broadly clavate to clavate to subfusiform, up to 113 × 40 µm or larger; vascular hyphae 3.8 - 17.0 µm wide, sinuous, locally in tangles, common. LAMELLA TRAMA: bilateral; central stratum collapsed; parameter unmeasurable; subhymenial base not distinguishable; filamentous, undifferentiated hyphae 3.0 - 8.2 µm wide, branching, occasionally with yellowish subrefractive walls (but these possibly from invasive mold); terminal, divergent inflated cells not observed; vascular hyphae not observed. SUBHYMENIUM: apparently(2) pseudoparenchymatous; parameters unmeasurable; with two to three cells below bases of longest basidia/-oles and three to six cells below bases of shortest basidia/-oles, with cells smallest near bases of basidia/-oles, with larger cells up to 21 × 16.0 µm [but these possibly(2) in central stratum], with basidia arising from inflated cells (dominant) and (occasionally) short partially inflated hyphal segments. BASIDIA: 41 - 66 × 9.8 - 25 µm, with those of greater width having balloon-like apical portions, dominantly 4-, but also 2- and 1-sterigmate, with sterigmata up to 6.5 × 2.5 µm; clamps not observed. UNIVERSAL VEIL: *On pileus* (PDD 32108, specimen B): with gelatinized lumps of reddish brown tissue; filamentous, undifferentiated hyphae 2.5 - 7.5 µm wide, branching, plentiful, singly and in fascicles, collapsing, partially gelatinized; inflated cells colorless to slightly sordid to reddish brown, clavate to broadly clavate to ellipsoid to subglobose to globose, up to 90 × 52 µm, dominating, terminal singly, thin-walled, collapsing, partially gelatinizing; vascular hyphae not observed. *On lower stipe, exterior surface*: probably dominated by hyphae, collapsed and gelatinized, red-brown. *On lower stipe, interior*: filamentous, undifferentiated hyphae 2.8 - 10.0 µm wide, branching, plentiful, singly and in fascicles, interwoven in rather sparse lattice; inflated cells dominating, terminal, singly [or in chains *per* Ridley (1991: 333)], thin-walled, pale brown, broadly subfusiform to clavate to broadly clavate to ellipsoid to subglobose, up to 77 × 62 µm; vascular hyphae not observed. *On lower stipe, inner surface*: like interior, but slightly gelatinized. STIPE CONTEXT: longitudinally acrophysalidic; filamentous, undifferentiated hyphae 2.0 - 6.0 µm wide, branching, plentiful, often in fascicles; acrophysalides plentiful, dominating away from surface, occasionally broadly rounded at base, with thin walls, up to 343 × 51 µm; vascular hyphae 8.0 - 13.2 µm wide, common near (concentrated at) surface, locally tangling, occasionally branching. TISSUE ON GILL EDGE: red-brown layer up to 140 µm thick, at first dominated by inflated cells (up to 47 × 35 µm) in eight or more layers but these extensively gelatinizing and depigmenting, then dominated by densely packed, interwoven, filamentous, undifferentiated hyphae in layer 15 - 20 hyphal diameters thick, not so strongly gelatinizing.

BASIDIOSPORES of “individuals with friable volva”: [80/3/2] (10.5-) 11.0 - 14.0 (-21.2) × (10.0-) 10.2 - 13.5 (-20.0) µm, (L = 12.2 - 12.3 µm; L' = 12.3 µm; W = 11.6 - 11.8 µm; W' = 11.7 µm; Q = (1.0-) 1.02 - 1.09 (-1.13); Q = 1.04 - 1.06; Q' = 1.05), hyaline, colorless, smooth, with walls slightly thickened or up to 0.7 µm thick or (occasionally) thin, inamyloid, globose to subglobose, at least somewhat adaxially flattened; apiculus sublateral, cylindrical to truncate-conic, prominent; contents granular to multiguttulate to monoguttulate with additional small granules; color in deposit not recorded.

*Habitat of “individuals with friable volva”*: Solitary to subgregarious. Under *Nothofagus fusca* and *N. menziesii* or under *N. menziesii* or under *N. solandri* var.

*Material examined of “individuals with friable volva”*: **NEW ZEALAND**: GISBORNE—Urewera Nat. Pk. - Mokau Track, 24.iii.1974 B. & S. Kendrick & J. M. Dingley *s.n.* (paratype, PDD 32108). NELSON—Maruia, 27.iii.1970 R. F. R. McNabb *s.n.* (paratype, PDD 31276). {Should also obtain 14.ii.1982 Taylor 1171, 17.iv.1987 G. M. Taylor *s.n.* [Ridley 528], and 5.iii.1955 G. Stevenson 969 (K). Note that Ridley 528 is not a paratype of *A. pekeoides*; but, according to Geoff, is listed in the accessory publication mentioned on the second page of the protologue.}

Having a nonmembranous universal veil dominated by inflated cells is sufficient to segregate these paratypes as a species distinct from *A. pekeoides*. In addition, the “individuals with with friable volva” differ from *A. pekeoides* in the following:

- spores more nearly globose
- spores having slightly thickened walls (up to 0.7 µm thick)
- basidia and basidioles including some with curiously ballooning apical portions having widths up to 25 µm or more (Fig. ??)
- pileipellis containing common vascular hyphae
- tissue on the edge of lamellae deeply pigmented and broader
- marginate lamellae

- universal veil taking on rather deep grayish or brownish tones at maturity.

Among taxa examined, the most similar is *A. sororcula* Tulloss *et al.* from Andean Colombia. However (Tulloss and Franco-Molano, to appear??), this species has

- thin-walled spores that are slightly less globose on average than those of the present species
- basidia that are slightly thickened near the apex and, occasionally, bear basal clamps
- universal veil remnants on the stipe base often forming a cupulate volva
- inflated cells of the universal veil with slightly thickened walls
- occasional clamps in the interior of the universal veil
- [more].

Unfortunately, both collections examined of “individuals with friable volva” were somewhat damaged by mold. Since this material undoubtedly represents a new species, additional well-annotated and well-dried collections of this entity would be very valuable.

## 2. “White Individuals.”

PILEUS: 80<sup>±</sup> mm wide, white or white with slightly smoky white over disc to sordid white, smooth; *margin* striate-sulcate (0.5R); *universal veil* absent.

LAMELLAE: adnexed to free, white, up to 7 mm broad, not forking, with edges slightly darker and flocculose; *lamellulae* truncate to rounded truncate to subtruncate, in three uneven ranks.

STIPE: 120<sup>±</sup> × 12.5<sup>±</sup> mm, white near apex, slightly grayish brown near base, shaggy with appressed lacerated areas; *exannulate*; *contents* not described; *universal veil* as saccate volva, white to dirty white, membranous, at least sometimes bilobate, up to 50<sup>±</sup> mm high.

*Odor and taste* not recorded.

MACROCHEMICAL TESTS: none recorded.

PILEIPELLIS: 120 - 145 (-170) μm thick, gelatinizing only just at the surface, colorless for a few hyphal diameters at surface, otherwise orangish to brownish yellow; filamentous, undifferentiated hyphae 2.5 - 6.4 μm wide, branching, criss-crossed over disc, dominantly subradially oriented at mid-radius; vascular hyphae 2.4 - 17.8 μm wide, infrequently branching, unevenly distributed, locally common, sinuate, with irregular outline, with those of larger diameter deeply pigmented brownish orange to red-brown, with those of smaller diameter sordid yellowish to brownish yellow. PILEUS CONTEXT: filamentous, undifferentiated hyphae 2.9 - 9.5 μm wide, branching, forming an open lattice structure, sometimes constricted at septa, sometimes with slightly inflated intercalary segment, plentiful; acrophysalides plentiful, thin-walled and easily broken by sectioning, elongate-ovoid to subpyriform to broadly clavate to clavate to narrowly clavate to subfusiform, up to 170 × 55<sup>±</sup> μm; vascular hyphae 3.8 - 17.8 μm wide, occasionally branching, rather common, with those of larger diameter orange-brown and those of smaller diameter sordid brownish yellow, sinuous, occasionally with tight coils, occasionally crossing into pileipellis. LAMELLA TRAMA: bilateral; central stratum and adjacent subhymenial base collapsed or poorly rehydrating in material examined, with central stratum apparently entirely composed of filamentous, undifferentiated hyphae; subhymenial base contains branching hyphae and narrow subfusiform to elongate curved intercalary cells (*e.g.*, 26 × 8.0 μm) or slightly inflated intercalary hyphal segments, with the inflated or partially inflated elements giving rise to subhymenium; filamentous, undifferentiated hyphae 2.0 - 6.5 μm wide, branching, apparently dominant in central stratum; divergent, terminal inflated cells not observed; refractive hyphae present, but possibly part of hyphomycete invading from lamella edge; vascular hyphae not observed with certainty. SUBHYMENIUM: as shallow branching structure containing small subglobose to ellipsoid to heart- or “Y”-shaped inflated cells and branched or irregular partially inflated cells and uninflated hyphal segments; with basidia arising from inflated and partially inflated cells and with some basidiales arising from uninflated hyphal segments, with bases of longer basidia only one or two cells separated from subhymenial base. BASIDIA: 40 - 59 (-76) × 11.5 - 16.0 (-17.2) μm, about evenly distributed between 4-, 2-, and 1-sterigmate in some specimens, dominantly 4- and infrequently 1- or 2- or 3-sterigmate in others, with sterigmata up to 8.9 × 3.8 μm; clamps not observed. UNIVERSAL VEIL: *On pileus*: absent or as scattered partially gelatinized hyphal fragments and collapsed inflated cells from inner surface of volval limb. *On stipe base, exterior surface*: lattice with large gaps comprising interwoven filamentous, undifferentiated hyphae 1.8 - 7.6 μm wide, branching, singly and in broad fascicles, partially gelatinized. *On stipe base, interior*: filamentous, undifferentiated hyphae 2.2 - 12.7 μm wide, frequently branching, dominating in most regions, singly and in fascicles interwoven in open lattice structure, occasionally with yellowish subrefractive walls; inflated cells thin-walled, terminal singly, rather common to plentiful, sometimes clustered, subglobose to ovoid to broadly ellipsoid to broadly clavate, up to 121<sup>±</sup> × 74 μm; vascular hyphae 2.3 - 8.9 μm wide, rarely branching, infrequent, unevenly distributed, sordid yellowish to brownish yellow. *On stipe base, inner surface*: comprising very narrow filamentous, undifferentiated hyphae singly and in fascicles, partially gelatinized or not gelatinized distributed in large patches (1 - 2 hyphal diameters thick) distributed over upper part of limb (formerly in contact with pileus) and, otherwise, simply exposed tissue of interior. STIPE CONTEXT: longitudinally acrophysalidic; filamentous, undiffer-

entiated hyphae 2.4 - 15.2  $\mu\text{m}$  wide, branching, plentiful, dominant toward external surface; acrophysalides plentiful, dominating in interior, thin-walled, up to  $239 \times 43 \mu\text{m}$ ; vascular hyphae 7.2 - 12.7  $\mu\text{m}$  wide, sinuous, infrequent.

BASIDIOSPORES of “white individuals”: [78/4/3] (9.5-) 11.3 - 13.9 (-22)  $\times$  (8.6-) 10.0 - 13.0 (-17.5)  $\mu\text{m}$ , (**L** = 12.0 - 13.1  $\mu\text{m}$ ; **L'** = 12.4  $\mu\text{m}$ ; **W** = 11.0 - 11.8  $\mu\text{m}$ ; **W'** = 11.3  $\mu\text{m}$ ; **Q** = (1.04-) 1.05 - 1.16 (-1.37); **Q** = 1.09 - 1.11; **Q'** = 1.10), hyaline, colorless, smooth, thin-walled, inamyloid, subglobose, infrequently globose or broadly ellipsoid, at least somewhat adaxially flattened, occasionally (especially when incompletely mature) langeniform to clavate-langeniform to sublachrimiform; apiculus sublateral, cylindrical, often proportionately elongated; contents dominantly monoguttulate, with or without additional small particles; color in deposit unknown.

*Habitat of “white individuals”*: Solitary to subgregarious. Under *Nothofagus truncata* or under *N. menziesii*. A “white individual” paratype of *A. pekeoides* not reviewed was collected under *Kunzea ericooides* [Taylor 819 (PDD)].

*Collections examined of “white individuals”*: **NEW ZEALAND**: NELSON—Karamea - Umere, 4.i.1970 R. F. R. McNabb *s.n.* (paratype, PDD 31209). WELLINGTON—Rimutaka For. Pk. Orongorongo Track, 1.iv.1987 G. S. Ridley 362 (paratype, PDD 56145); Orongorongo Valley, Paua Ridge, 8.iv.1987 G. S. Ridley 394 (paratype, PDD 56147).

The “white individuals” differ from *A. pekeoides* in at least the following:

- shallow structure of the subhymenium with common partially inflated to inflated branching cells
- color of pileus
- relative length of marginal striations of pileus
- presence of relatively common, deeply pigmented vascular hyphae in pileipellis
- size of inflated cells in universal veil (much larger in the present entity)
- dominance of non-4-sterigmate basidia.

On the grounds of these strong differentiating characters, I propose that the “white individuals” represent a third species within the original concept of *A. pekeoides*. Of the three specimens examined, the McNabb collection is best documented with regard to its fresh state; and, for the most part, the fruiting body is well-preserved. Unfortunately, the exception is the preservation of the key tissues of the lamella trama. Therefore, I will not propose a name at this time in hopes of being able to base it on a better type in the future.