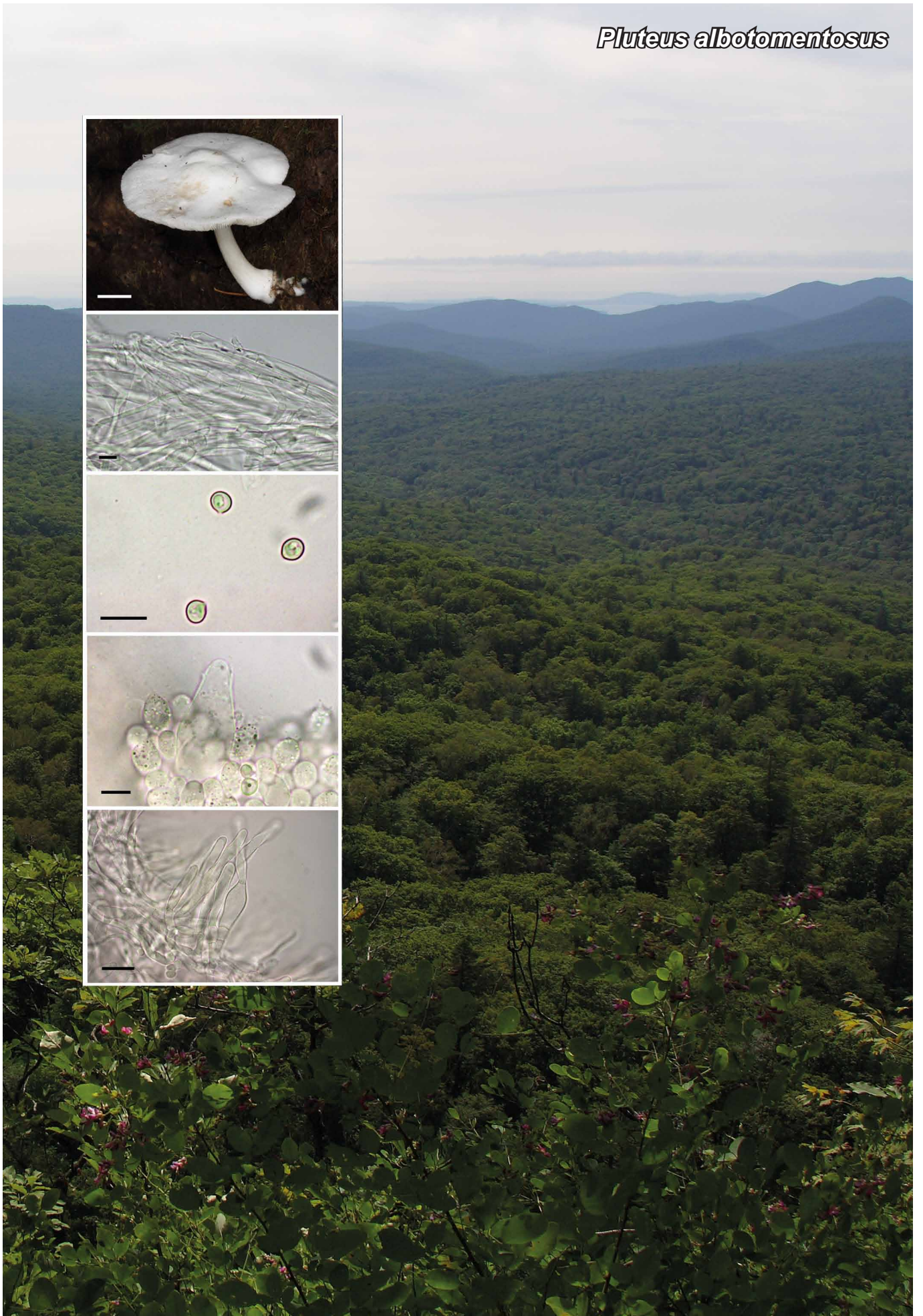
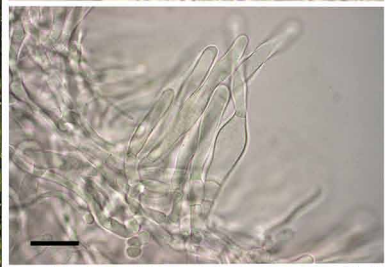
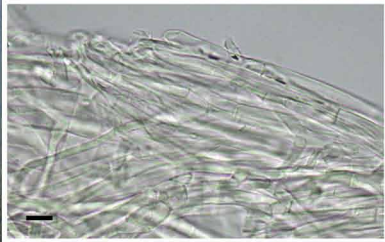


*Pluteus albotomentosus*



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## *Pluteus albotomentosus* E.F. Malysheva & Malysheva, *sp. nov.*

*Etymology.* *Albotomentosus* refers to the colour and character of the pileus surface.

*Pileus* 50–60 mm diam, hemispherical becoming applanate with low, broad umbo, pure white when fresh, yellowish white or cream (4A2–A3) in herbarium; fine-tomentose over the entire surface, slightly flocculose towards margin. *Lamellae* free, crowded, broadly ventricose, white becoming pink with concolorous even edges. *Stipe* 60 × 8–10 mm, broadening downwards, with vague basal bulb up to 12–15 mm wide; solid, longitudinally fibrillose, white to slightly yellowish white, with white basal tomentum. Context white. Smell weak, sourish. *Basidiospores* 6.0–6.6(–6.8) × 5.3–6.0(–6.2) μm, Q = 1.00–1.21(–1.28), Q\* = 1.11 (n = 30), subglobose to broadly ellipsoid, some oviform, smooth, thin- to slightly thick-walled, hyaline, contents with guttules. *Basidia* 23–32 × 6–8 μm, 4-spored, broadly clavate. *Pleurocystidia* abundant, 27–70 × 11–26 μm, utriform to broadly lageniform with very short and wide neck, some broadly clavate, hyaline, thin-walled. *Lamellae* edge sterile. *Cheilocystidia* numerous, forming dense layer, 23–65 × 5–11 μm, variable in shape, predominantly cylindrical, narrowly lageniform or narrowly clavate, thin-walled, hyaline. *Pileipellis* a cutis, made up of undifferentiated cylindrical hyphae up to 6–10 μm wide, thin- or slightly thick-walled, colourless. *Stipitipellis* a cutis of 5–12 μm wide hyaline hyphae, at lower part of stipe with scarce hyphae-like, cylindrical or narrowly clavate caulocystidia, 10–30 × 4–7 μm. *Clamp connections* absent in all tissues.

*Habitat & Distribution* — Solitary on mossy decayed log of deciduous tree. Found once in the south of Primorye Territory.

*Typus.* Russia, Primorye Territory, 'Land of the Leopard' National Park, watershed of Ananjevka and Gryaznaya Rivers, mixed forest (*Quercus mongolica*, *Carpinus cordata*, *Ulmus japonica*, *Abies nephrolepis*), on mossy log of deciduous tree, 1 Sept. 2011, A. Kovalenko (holotype LE 289394; ITS sequence GenBank KM658284, MycoBank MB810391).

*Notes* — The macroscopic description is based on fresh basidiocarps from the original collection and the photos taken at the site. Colour terms are according to Kornerup & Wanscher (1978). Microscopic observations and photos were made from dried material mounted in 5 % KOH using an AxiolmagerA1 light microscope.

*Pluteus albotomentosus* is quite different from the other white-coloured *Pluteus* species because of a combination of distinctive morphological characters, a scilicet distinctly tomentose pure white pileus, thin-walled utriform pleurocystidia, cylindrical cheilocystidia and a cutis-like pileipellis. The pileipellis structure and non-metuloid cystidia place *P. albotomentosus* in sect. *Hispiderma*. Based on this it can be compared to *P. ephebeus*, which is easily distinguished by its dark basidiocarp colour, larger spore size (5.5–8.5 × 4.5–6.0(–7.0) μm according to Vellinga 1990) and differently shaped cystidia. The molecular data (ITS sequence) indicate that it is closely related to *P. ephebeus* but the percentage of similarity between sequences of the two species is only 95–96 % or less.

*Colour illustrations.* Russia, Primorye Territory, 'Land of the Leopard' National Park, area of the East Manchurian mountains, Manchurian mixed forests, where the holotype was collected; basidiocarp, pileipellis, basidiospores, pleurocystidia, cheilocystidia (all from holotype). Scale bars = 1 cm (basidiocarp), 10 μm (microscopic structures).