

***Pseudotorellia* FROM THE LOWER CRETACEOUS COAL-BEARING DEPOSITS OF EASTERN TRANSBAIKALIA**

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Abstract. *Pseudotorellia kharanorica* n. sp. Bugdaeva is from Kharanor Suite of Chita Province, eastern Transbaikalia. *Pseudotorellia* seem to have been a dominant plant of the peat bog communities.

Новый вид *Pseudotorellia kharanorica* из харанорской свиты Читинской области отличается от других видов узкими заостренными килеватыми листьями, беспорядочно расположенными устьицами без папилл, прямыми или мелкоизвилистыми стенками эпидермальных клеток.

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Several lower Albian coal mines in Chita Province, eastern Transbaikalia, contain a diverse fossil flora [1]. In the Kharanor mine, plant remains are from the minable coal as well as from the overlying shales and tuff. Macerated coal contains fragmented leaves of *Pseudotorellia* and shoots of the brachyphyllous conifer *Pagiophyllum*. Compressions of *Pseudotorellia* constitute up to 90-100% of the samples. Notably, *Pseudotorellia* shows frequent fungal damages which is absent in *Pagiophyllum*.

In the overlying shales, the needle-leaves of a conifer *Pityophyllum* typically are more common than *Pseudotorellia*, while *Pagiophyllum* is absent. Some plant beds contain monodominant assemblages with *Pityophyllum* or the bennettite *Nilssoniopteris*, while ginkgophytes are rare.

These observations indicate that *Pseudotorellia* was a dominant peat bog plant and a major producer of leaf coals. Other *Pseudotorellia* species are also from coal beds [3].

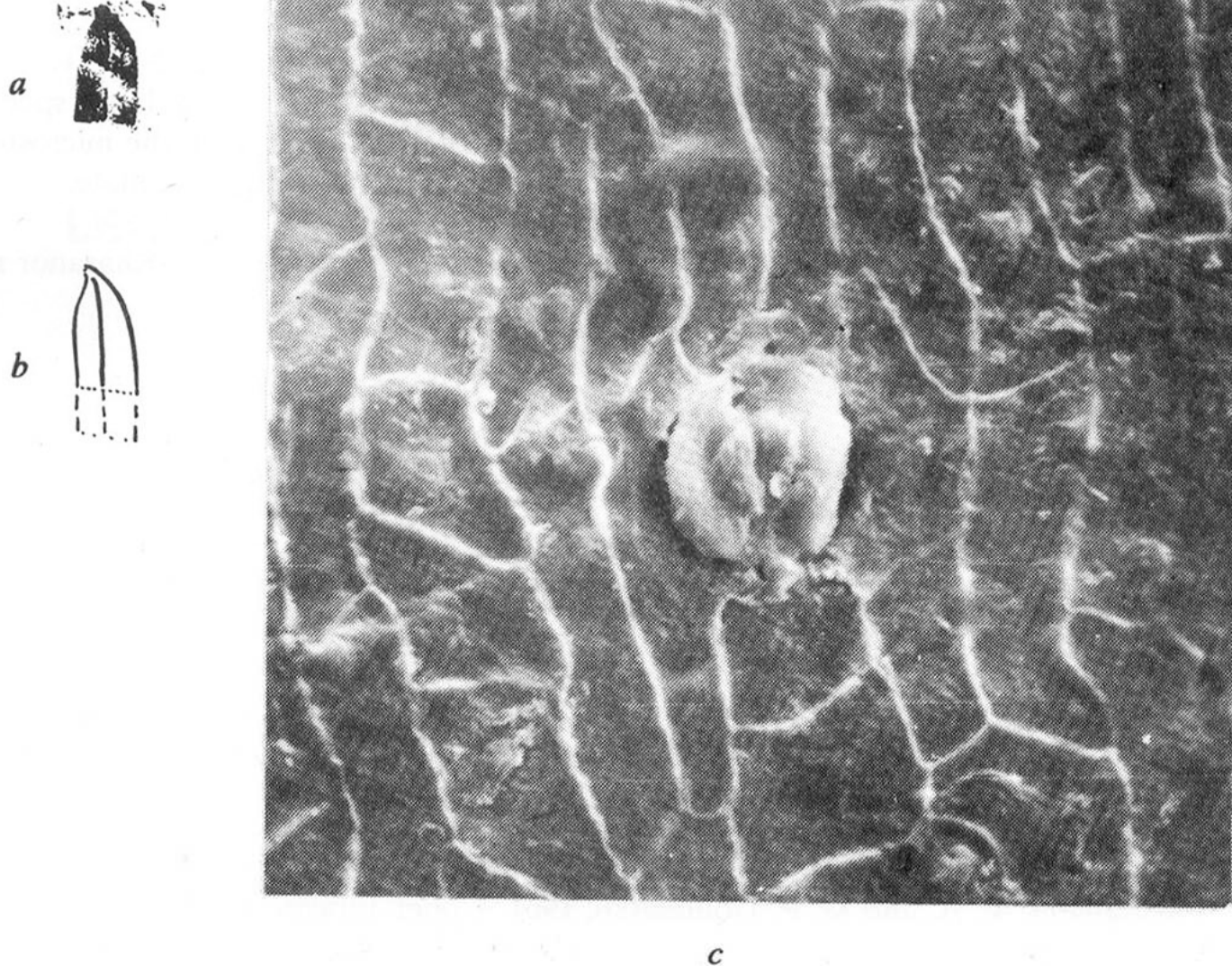


Fig. 1. *Pseudotorellia kharanorica*, sp. nov.: a, b - distal part of leaf, Holotype No. 313522/4-6766, $\times 1$; c - stoma on lower cuticle, SEM, $\times 1000$.

Pseudotorellia kharanorica Bugdaeva, sp. nov.

Fig. 1

Name. After the type locality, Kharanor.

Holotype. No. 313522/4-6766, deposited in Institute of Biology and Pedology (fig. 1); Kharanor mine, Chita Province, Transbaikalia.

Diagnosis. Leaves linear-oblongate, 2.4 mm wide, keeled, with mucronate apex. Venation inconspicuous. Upper cuticle showing elongate retanguloid, trapezoid, or irregular cells. Average dimensions of elongate cells $90-110 \times 22-28 \mu\text{m}$, of irregular cells $50-70 \times 30-40 \mu\text{m}$. Periclinal walls with more-or-less conspicuous median ridge. Anticlinal walls straight along margins, microsinuate in middle part of leaf. Lower cuticle showing stomata scattered all over leaf surface, not differentiated into definite stomatal bands. Stomata with five to six subsidiary cells, nonpapillate.

Remarks. All the leaf remains are fragmentary, not more than 10 mm long. The entire length could be up to 30 mm. The maximum breadth of the leaf blade is in the upper quarter,

opening rapidly to the rounded, shortly mucronate apex that distinguishes the species from the small-leaved *Pseudotorellia*, such as *P. minuta*, *P. tjukansis* and *P. angustifolia* [2-5]. Keel in *P. angustifolia* is not a permanent feature. *P. kharanorica* differs further from the latter species in scattered stomata not forming definite intercostal stomatal bands as well as in the microsinuate epidermal walls. In most *Pseudotorellia* species, subsidiary cells are strongly papillate.

Material. Abundant leaf fragments from coal beds and overlying tuffs; Kharanor mine, Transbaikalia; Kharanor Suite, Lower Albian.

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