

## New species of *Deschampsia* (Poaceae) from Japan

### Новый вид рода *Deschampsia* (Poaceae) из Японии

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**Abstract.** A new species of the genus *Deschampsia* P. Beauv. was revealed by N. N. Tzvelev in 2015, among the herbarium material from Japan (Hokkaido, Shiretoko Peninsula). It belongs to *D. aggr. cespitosa* (L.) P. Beauv., but differs from the other species of this group principally by folded surprisingly thick rigid leaf blades. *Deschampsia shiretokoensis* Tzvelev et Prob. sp. nova is described here.

**Keywords:** Poaceae, *Deschampsia*, new species, Shiretoko Peninsula, Hokkaido, Japan.

**Аннотация.** Из Японии (о. Хоккайдо, п-ов Сиретоко) описывается выявленный Н. Н. Цвелёвым в 2015 году новый для науки вид — *Deschampsia shiretokoensis* Tzvelev et Prob., имеющий необычно толстые жесткие пластинки листьев, в отличие от всех других видов родства *D. cespitosa* (L.) P. Beauv.

**Ключевые слова:** Poaceae, *Deschampsia*, новый вид, п-ов Сиретоко, Хоккайдо, Япония.

In the early 2015, when studying an additional herbarium material of a complicated grass genus *Deschampsia* P. Beauv. mostly from the Far East, N. N. Tzvelev found a specimen from the Shiretoko Peninsula in Hokkaido, Japan, representing a new species. The species belongs to *D. aggr. cespitosa* (L.) P. Beauv., but differs from the other species of this group principally by thick rigid folded leaf blades. This herbarium specimen was passed to Herbarium VLA as a duplicate and a gift during the work of Dr. V. Yu. Barkalov in Sapporo, Herbarium of the Faculty of Agriculture, the Hokkaido University Museum, Sapporo, Japan (SAPS), from the Curator Dr. Hideki Takahashi. The specimen was later transferred to the Herbarium LE (Komarov Botanical Institute of RAS, St. Petersburg). There is a determination note on this sheet: «*Deschampsia cespitosa* var. *festucifolia* Honda». The Japanese agrostologist T. Osada (1993) synonymized the latter taxon with *D. caespitosa* subsp. *orientalis* Hultén: this one is common in the Russian Far East (especially in the North Sakhalin), and is known at the rank of species under the name *D. paramushirensis* Honda (Tzvelev, Probatova, 2012). The image of *D. caespitosa* var. *festucifolia* Honda (Osada, 1993: 255) represents tall plants with broadly spreading panicles, and does not match to the specimen from Shiretoko Peninsula.

*Deschampsia shiretokoensis* Tzvelev et Prob. sp. nova is described below.

***Deschampsia shiretokoensis*** Tzvelev et Prob. sp. nova (Figs. 1; 2).

Plants 15–25(30) cm alt., forming small dense tussocks. Stems erect. Leaf blades 1–1.5 mm diam., folded, rather thick, very rigid when dried, greyish-



Fig. 1. Details of the inflorescence structure of *Deschampsia shiretokoensis*.

1a — panicle branch; 1b — spikelet; 2a — glumes; 2b — flower.  
Scale bars: 1 — 2.5 mm; 2 — 1.25 mm.



Fig. 2. Holotype of *Deschampsia shiretokoensis* (LE01032141).

green, adaxially very scabrous with spinules on ribs. Ligules 2.5–4 mm, acute. Panicles 5–7 cm, contracted, rather dense, slightly pinkish-violet, the panicle branches scabrid mostly in distal part, the longer branches bearing 10–17 spikelets per branch. Spikelets 3–4 mm, with (1)2(3) well developed florets. Lower glume 2.3–2.6 mm, upper glume 2.6–3.2 mm. Lemma of the lowest floret (2.3)2.5–3 mm, awn exerted near the middle or from the lower  $\frac{1}{3}$  of the lemma, exceeding the lemma apex for 0.5–0.7(1.5) mm. Anthers 1.0–1.3 mm.

**Holotype** (Fig. 2): «Japan, Hokkaido, Shiretoko, 27 VII 1962, Ko. Ito» (LE: LE01032141; isotypes – SAPS).

**Affinity.** Differs from the other species of *D. cespitosa* complex (Probatova, 2015; Tzvelev, Probatova, 2012, 2015) by thick folded leaf blades, very rigid when dried. From the species distributed in oceanic regions of the Russian Far East, especially in Sakhalin and the Kurils, namely *D. paramushirensis* Honda, *D. kurilensis* (Kawano) Tzvelev et Prob., *D. macrothyrsa* (Tatew. et Ohwi) Kawano, our species also differs by shorter panicles with ascending branches, poorly deflecting from inflorescence axis, by minor upper glume, and by more exerted awns.

**Distribution.** Japan, Hokkaido, Shiretoko Peninsula. ?Endemic.

It is quite possible that *D. shiretokoensis* might be found in the South Kurils, too.

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