



Article

Validation of four names in *× Elyhordeum* Mansf. ex Tsitsin & K.A.Petrova (Poaceae)

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Abstract

The names of four nothospecies in *× Elyhordeum* Mansf. ex Tsitsin & K.A.Petrova (*× E. detrinense*, *× E. khokhrjakovii*, *× E. olaense*, and *× E. sinegoricum*, Poaceae) invalidly published by D.S.Lysenko and included in the *Flora and Vegetation of Magadan Region* (2010) are validated.

Keywords: *× Elyhordeum*, Magadan Region, Poaceae, Russia, validation

Introduction

The Herbarium of the Institute of the Biological Problems of the North FEB RAS (herbarium code – MAG according to Tries, 2013) was founded in 1970 by A.P.Khokhryakov. A large part of the collection comprises plants collected from Magadan Region and neighboring territories. To date, the collection contains ca. 110000 sheets of vascular plants. The collection of seeds and fruits numbers over 3600 specimens. The mycological herbarium contains over 10000 samples of macromycetes, the collection of lichens has over 4700 specimens, and that of bryophytes about 4400 specimens.

Recently, work on the revision of this collection for the creation of a database and subsequent digitization of specimens has begun. Especially valuable is authentic material representing taxa described from Magadan Region. Results of the type collection studies, for the most part, have been published (Mochalova and Khoreva, 2015), though there are still some outstanding cases.

The list of type specimens of vascular plants from Magadan Region, described mainly by Khokhryakov, and herbarium photographs are available in Russian and English, respectively, at

the following two addresses: <http://www.ibpn.ru/kollektsii/261-tipovye-obraztsy-sosudistykh-rastenij> and <http://www.ibpn.ru/en/collections/82-tipovye-obraztsy-sosudistykh-rastenij>.

While revising the collection, the author of the current publication came across authentic herbarium specimens of × *Elyhordeum* Mansf. ex Tsitsin & K.A.Petrova collected by D.S.Lysenko.¹ There are a few herbarium sheets for each of the following taxa in this nothogenus: × *E. detrinense*, × *E. khokhrjakovii*, × *E. olaense*, and × *E. sinegoricum*, their labels handwritten by Lysenko. Upon studying the protologues (Lysenko, 2010: 97–98), it became obvious that all four names had been published invalidly, as they did not have descriptions or diagnoses in Latin, but only in Russian, which is contrary to Art. 39.1 of the ICN (Shenzhen Code, Turland *et al.*, 2018). The diagnoses provided in the original publication (Lysenko, 2010) in Russian are translated into English here below. Holotype references are provided following the citations made by Lysenko (2010). The names are ascribed to Lysenko in accordance with Art. 46.2 of the ICN (Turland *et al.*, 2018) as the names and diagnoses are clearly associated with his name.

Nomenclature and taxonomy

× *Elyhordeum detrinense* Lysenko **sp. nov.** (= *Elymus jacutensis* (Drobow) Tzvelev × *Critesion jubatum* (L.) Nevski) (Fig. 1). (urn:lsid:ipni.org:names: 77204863-1)

Diagnosis: The new taxon is closely related to × *Elyhordeum chatangense* (Roshev.) Tzvelev, from which it is different in longer lemma awn (>1.5 cm).

Type: Russia, Magadan Region, Tenkinskiĭ District, Ust-Omchug Village, road margin by the left bank of the Detrin River, together with *Critesion jubatum* and *Elymus jacutensis*, very rare, 30.VII.2007, D.Lysenko (MAG MAG0000031! – holotype; MAG0000036!, MAG0000037!, LE!, MHA!, VLA! – isotypes (5), IRK55752! – fragment of isotype).

Distribution: Rare in Kolyma Floristic District (Ust-Omchug Village), in ruderal habitats, man-made meadows, roadsides.

× *Elyhordeum khokhrjakovii* Lysenko **sp. nov.** (= *Elymus kronokensis* (Kom.) Tzvelev × *Critesion jubatum* (L.) Nevski) (Fig. 2). (urn:lsid:ipni.org:names: 77204864-1)

Diagnosis: The new taxon is closely related to × *Elyhordeum chatangense*, from which it is different in having completely glabrous, often purple lemmas and scabrous (but not pilose) spikelet awns.

¹ Dmytry Sergeevich Lysenko (1983-2011), PhD, worked in Department of Botany IBPN FEB RAS in 2005-2011. His research interests were regional flora, synanthropic flora, hybrid taxa.

Type: Russia, Magadan Region, Khasynskiĭ District, Splavnaya Village, field margin, 3.VIII.2007, *D.Lysenko* (MAG MAG0000026! – holotype; MAG0000034!, LE! – isotypes (2), IRK55757! – fragment of isotype).

Paratypes: Russia, Magadan Region, Khasynskiĭ District, Splavnaya Village, meadow near abandoned barns, 4.VIII.2006, *D.Lysenko* (MAG MAG0000029!, MHA!, VLA! (3), fragment of paratype: IRK55756!); Russia, Magadan Region, Tenkinskiĭ District, Ust-Omchug Village, mown meadow nearby, 12.VIII.1978, *A.P.Khokhryakov* (MAG0000025!, MAG0000028! (2), fragment of paratype: IRK55757!);

Distribution: Rare in Okhotskiĭ Floristic District (villages of Gadlya and Splavnaya), in Kolyma Floristic District (Seĭmchan and Ust-Omchug Villages, Susuman) in ruderal habitats, man-made meadows, at roadsides.

Note: Taxon named after A.P.Khokhryakov, who pointed out such cases of hybridisation (Khokhryakov, 1985: 70). The mention of *Hordeum sibiricum* Roshev. for Magadan Region by Khokhryakov was based partly on specimens of the new hybrid.

× ***Elyhordeum olaense* Lysenko sp. nov.** (= *Elymus boreoochotensis* A.P.Khokhr. × *Critesion jubatum* (L.) Nevski) (Fig. 3). (urn:lsid:ipni.org:names: 77204865-1)

Diagnosis: The new taxon is closely related to × *Elyhordeum kolymense* Prob., from which it is different in having completely glabrous lemmas and scabrescent spikelet awns.

Type: Russia, Magadan region, Olskiĭ district, Gadlya Village, near allotments, 24.VII.2008, *D.Lysenko* (MAG0000027! – holotype; MAG0000019!, MAG0000020!, MAG0000021!, LE!, MHA!, VLA! – isotypes (6), IRK55753! – fragment of isotype).

Distribution: Very rare in Okhotskiĭ Floristic District (Gadlya Village), together with parental species in ruderal habitats, man-made meadows, at roadsides.

× ***Elyhordeum sinegoricum* Lysenko sp. hybr. nov.** (= *Elymus subfibrosus*? (Tzvelev) Tzvelev × *Critesion jubatum* (L.) Nevski) (Fig. 4). (urn:lsid:ipni.org:names: 77204866-1)

Diagnosis: The new taxon is closely related to × *Elyhordeum chatangense*, from which it is different in having glabrous lemmas.

Type: Russia, Magadan Region, Yagodinskiĭ District, Sinegorye Village, trampled meadow near dwelling, 29.VII.2009, *D.Lysenko* (MAG0000030! – holotype; MAG0000013!, MAG0000014!, MAG0000015!, LE!, MHA!, VLA! – isotypes (6), IRK55754! – fragment of isotype).

Paratypes: Russia, Magadan Region, Srednekanskiĭ District, Seĭmchan Village, wasteland near school, together with *Elymus subfibrosus*, 01.VIII.2005, *D.Lysenko* (MAG0000009!); Russia, Magadan Region, Yagodninskiĭ District, Elgen Village, riparian meadow, 05.VII.1974,

A.P.Khokhryakov (MAG0000011!, MAG0000012!); Russia, Magadan Region, Srednekanskiĭ District, Korkodon Weather Station, along trail, 18.VIII.2010, *D.Lysenko* (MAG0000010!).

Distribution: Very rare in Kolyma Floristic District (Sinigorye, Seĭmchan and Elgen Villages), on sand deposits along the riverbanks, in ruderal habitats, man-made meadows, at roadsides.



Figure 1. Holotype of *x Elyhordeum detrinense* Lysenko



Figure 2. Holotype of *x Elyhordeum khokhrjakovii* Lysenko



Figure 3. Holotype of \times *Elyhordeum olaense* Lysenko



Figure 4. Holotype of *x Elyhordeum sinegoricum* Lysenko

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