Hiroshi Ikeda\textsuperscript{a,*}, Akiko Shimizu\textsuperscript{a} and Carlos Aedo\textsuperscript{b}: Nomenclature and Typification of \textit{Geranium yesoense} var. \textit{pseudopalustre} (Geraniaceae)

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Summary: Nakai (1909a) described var. \textit{pseudo-pratense} under \textit{Geranium yesoense} Franch. & Sav., but soon corrected the name to var. \textit{pseudo-palustre} (Nakai 1909b). According to the ICN Art. 51.1, this change is not allowed, and var. \textit{pseudopratense} must be maintained. Nakai did not cite specimens when he described \textit{G. yesoense} var. \textit{pseudopratense}, or when he changed the name to var. \textit{pseudopalustre}. We designate a specimen collected in Hakodate, Hokkaido (J. Matsumura s.n., 15 Aug. 1899, TI) as the lectotype for \textit{G. yesoense} var. \textit{pseudopratense}, because it is one of the specimens cited in the protologue of \textit{G. miyabei} Nakai, a replacement name for \textit{G. yesoense} var. \textit{pseudopratense} and agrees most closely with the original description.

\textit{Geranium yesoense} Franch. & Sav. (Geraniaceae) is a perennial herb, distributed in S. Kuriles, Hokkaido and northern Honshu (Akiyama 2001). \textit{Geranium yesoense} is a polymorphic taxon, within which several infraspecific taxa have been proposed (Nakai 1909a, b, 1911, 1912, Takeda 1910, Tatewaki 1936, Hara 1949, Mizushima 1954).

Nomenclature for \textit{Geranium yesoense} var. \textit{pseudopalustre}

On grassy places near the seacoast of Hokkaido and northern Honshu, Japan, occurs a morphotype of \textit{Geranium yesoense} characterized by shallowly incised leaves and a calyx with sparse, spreading hairs. Nakai (1909a) mentioned such plants in his key to the taxa of \textit{Geranium} in Japan and adjacent regions and proposed for it the name “var. \textit{pseudo-pratense}” in \textit{The Botanical Magazine}, Tokyo in May 1909. Soon after its publication, he corrected and changed the name, without comment, to “var. \textit{pseudo-palustre}” in the same journal in October 1909 (Nakai 1909b). Presumably, Nakai had intended to name these plants after \textit{G. palustre} L., since many specimens of this taxon had been identified as “\textit{G. palustre} L.”, but he mistakenly used the name “\textit{pratense}” in his first publication (Nakai 1909a), then attempt to correct it in his second publication (Nakai 1909b). Although “var. \textit{pseudopalustre}” has been widely used in the literature (e.g., Ohwi 1953, 1965, 1984, Kitamura and Murata 1961, Shimizu 1982, Akiyama 2001), the \textit{International Code of Nomenclature for algae, fungi, and plants} (ICN) (McNeill et al. 2012) states that “a legitimate name must not be rejected merely because it, or its epithet, is inappropriate or disagreeable, or because another is preferable or better known, or because it has lost its original meaning” (Art. 51.1). Therefore, “var. \textit{pseudopratense}” must be maintained and adopted instead of “var. \textit{pseudopalustre}” if one is to recognize these plants at the rank of variety under \textit{G. yesoense}.

Typification for \textit{Geranium yesoense} var. \textit{pseudopratense}

Nakai later changed his mind again and treated \textit{G. yesoense} var. \textit{pseudopratense} as a species distinct from \textit{G. yesoense}, which he named \textit{G. miyabei} (Nakai 1912). In describing \textit{G. miyabei}, he cited \textit{G. yesoense} var. \textit{pseudopalustre} (var. \textit{pseudopratense}) as a synonym, and cited seven specimens. Since \textit{G. yesoense} var. \textit{pseudopratense} was treated as a
Fig. 1. Lectotype of *Geranium yesoense* Franch & Sav. var. *pseudopratense* Nakai (J. Matsumura s.n., 15 Aug. 1899, TI).
synonym of *G. miyabei*, *G. miyabei* is considered to be a replacement name for *G. yesoense* var. *pseudopratense*. Therefore, *G. miyabei* is identical with *G. yesoense* var. *pseudopratense* and the type specimen of *G. yesoense* var. *pseudopratense* is the type specimen of *G. miyabei*. However, Nakai (1909a, 1909b) did not cite specimens when he described *G. yesoense* var. *pseudopratense* or var. *pseudopalustre*. We searched for specimens that Nakai himself indicated to be var. *pseudopratense* or var. *pseudopalustre*, but failed to locate any. It therefore seems reasonable to assume that the specimens collected before May 1909 that Nakai cited when he described *G. miyabei* were the original material used for describing *G. yesoense* var. *pseudopratense*. Among the specimens cited for *G. miyabei* by Nakai were collected before May 1909, they can be considered to be among the original material for *G. yesoense* var. *pseudopratense*. Among the specimens, one collected in Hakodate, Hokkaido (J. Matsumura s.n., 15 Aug. 1899, TI) agrees most closely with the original description. We designate that specimen to be the lectotype (Fig. 1).

**Taxonomic treatment**


Japanese name: Hama-fûro.  
Distribution: S. Kuriles, Hokkaido, Northern Honshu (Tohoku Distr.).

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**References**

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ハマフウロ（フウロソウ科）の学名とタイプ選定

ハマフウロは海岸近くの草地に生えるフウロソウ科の多年草で、北海道から本州北部（東北地方にかけ
て分布する。ハマフウロは通常エゾフウロの変種として扱われ、多くの図鑑ではGeranium yesoense
と指示している標本を見つけた。おそらく中井はハマフウロに対して「G. pseudopratense」と訂正してしま
ったものと考えられる。したがってハマフウロをエゾフウロの変種として扱う場合は、var. pseudopratense
を用いるのが正しい。

ハマフウロのタイプ標本に関しては、var. pseudopratenseの発表時には標本の引用がないことか
ら、中井が発表時に用いたと考えられる原資料（original material）を検討する必要がある。東京大学植物標本
室（TI）に収蔵されている標本を確認したが、明らかに中井がvar. pseudopratenseと指示している標本を見つけ
ることはできなかった。一方、中井は後にハマフウロを独立種と考え、1912年に植物学雑誌においてハマフ
ウロをG. Miyabei Nakaiとして7点の標本とともに発表した。その際にG. yesoense var. pseudopalustre
を同時におあげていることから、G. miyabeiはG. yesoense var. pseudopratenseに対する置
換名と考えられる。したがって、中井がG. miyabeiを記載する際に織数した標本の中で、1909年5月以前に採
集されたものがG. yesoense var. pseudopratenseの記
載の際にも用いられたと考えるのが合理的である。TIおよびTNSにはG. miyabeiの記載の際におあげた標本が7枚あった。これらはすべて1909年
5月以前に採集されたものであり、原資料と考えら
れる。その中から、松村任三が1899年に函館で採集し
た標本（J. Matsumura s.n., 15 Aug. 1899, TI）を選定基
準標本（lectotype）に指定する。

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