



Allium ramosum L. (Amaryllidaceae), a neglected alien in the European flora and its oldest record from Poland

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Allium ramosum Linnaeus (1753: 296) is a wild relative of *A. tuberosum* Rottler ex Sprengel (1825: 38), an important crop plant from East Asia (Blattner & Friesen 2006), while *A. ramosum* sometimes is cultivated as a vegetable in north-eastern China (Choi & Oh 2011). Both species belong to a small section *A. sect. Butomissa* (Salisbury 1866: 91) Kamelin (1973: 239), which is subordinated to a subgenus of the same name, *A. subgen. Butomissa* (Salisb.) N.Friesen in Friesen *et al.* (2006: 22).

Native range of the species is completely Asian, and it is known to occur in Kazakhstan, Russia, China, and Mongolia (Pavlov & Poljakov 1958; Friesen 1988, 1995; Xu & Kamelin 2000). It is considered to be a relic of former cultivation in Kyrgyzstan and Tajikistan (Vvedensky 1963). *Allium ramosum* prefers steppes, dry meadows, and petrophytic communities in the wild.

In Europe, *A. ramosum* is a rare alien species. It was introduced into Europe as a spice plant in the last decades of the 20th century and is still regularly available in the garden trade (R. Fritsch, pers. comm.). It was recorded for neither the whole Europe nor Eastern Europe in the latest general revisions (Stearn 1978, 1980; Omelczuk-Mjakushko 1979; Czerepanov 1995; Govaerts *et al.* 2005–2011) although there are some published records along railways (Baranova *et al.* 1992; Sauchuk & Tretjacov 2010).

Allium ramosum was first recorded in European Russia from four localities along Kazan—Yekaterinburg railway in the Republic of Udmurtia—Urom, Sarapul, Armyaz, and Sholya railway stations (Baranova *et al.* 1992). The distance between the westernmost Urom station and the easternmost Sholya station is ca. 100 km, and probably all four records originated initially from one event of long-distance dispersal.

A collection from vicinity of Urom by Baranova dates back to 1983 (deposited in herbarium LE!) and is the oldest gathering of *A. ramosum* from Udmurtia. Unfortunately, we did not check a specimen collected by Puzyrev in Udmurtia few years earlier, because probably it is preserved in Puzyrev's private herbarium (O.G. Baranova, pers. comm.). A population of *A. ramosum* in Urom was observed along a railway bed for four years in mid-1980s. It was stable consisting of at least 30 individuals (O.G. Baranova, pers. comm.).

For the next decades the Udmurtian records of *A. ramosum* suspected to be somewhat exceptional (Seregin 2005). Nowadays, all railway populations of *A. ramosum* in Udmurtia presumed to be extinct due to permanent use of powerful herbicides by the *Russian Railways*.

Dr. Tretjacov from Belarus Academy of Sciences kindly asked Dr. Seregin to identify some *Allium* collections from Belarus in May 2005. Among them a specimen of *A. ramosum* was discovered with the following label: “Belarus, Brest Oblast, Ivatsevichsky District, vicinity of Domanovo railway station, 5 km to SW, 947 km point, grass slopes along a railway bed, 5×100 m, 13 July 2003, *Tretjacov 10547*” (MSK-V! 32663). We could assume that such large population exists at least a decade.

Later on, Sauchuk & Tretjacov (2010) published another record of *A. ramosum* from Maloritsky district, Brest Oblast, Belarus. Although this locality on a meadow near Khotislav is situated ca. 4 km from Brest—Kovel railway it is presumed to be a garden escape (Sauchuk & Tretjacov 2010).