Summary. The discovery and introduction of *Patrinia heterophylla* Bunge are described. It was collected during the 2004 Glasnevin Central China Expedition and cultivated at Glasnevin’s adjunct garden, Kilmacurragh Botanic Gardens, in County Wicklow.

*Patrinia* is a small genus of some 20 species distributed in temperate regions of central and eastern Asia; eleven species are found in China, of which five are endemic. Based on molecular and morphological data, *Patrinia* are regarded as basal to the rest of the Valerianaceae (Heywood *et al.*, 2007), an exclusively herbaceous family related to Caprifoliaceae and Dipsaceae.

Despite their obvious horticultural potential, few members of this group are cultivated in British and Irish gardens, which is a great loss, since several are first-class garden plants. The first species to reach our shores was *Patrinia intermedia* (Hornem.) Roem. & Schult., a handsome plant to 45 cm high, bearing coryms of fragrant yellow flowers in early summer. It was first figured in the *Botanical Magazine* in 1804 (t. 714), as *Valeriana siberica* L. (Ingwersen, 1909). This was soon followed by *Patrinia siberica* (L.) Jussieu. Native to Siberia and China, it reached cultivation about 1820 through the nurserymen Messrs Loddiges & Sons and was figured in the *Botanical Magazine* (t. 2325) in 1822 as *Valeriana ruthenica* Willd. *Patrinia monandra* C. B. Clarke, another showy species from north-east India and western China, was first discovered near Darjeeling by Sir Joseph Dalton Hooker in April 1848 and introduced by him shortly afterwards.

Over 60 years later, in 1910, *Patrinia triloba* Miq. from Japan, appeared in this journal (t. 8328), while *Patrinia triloba* Miq. var. *palmata* (Maxim.) Hara, also from Japan, reached cultivation at the turn of the 20th century when seeds from the Tokyo Botanic Gardens were received at Kew in 1906 and plants first blossomed there in July 1908. Alas, few of the patrinias have ever gained a permanent foothold in British or Irish gardens; the species illustrated here are first class garden plants and are worthy of wider cultivation.

While travelling on the Glasnevin Central China expedition in Hubei Province, China in September to October 2004, our group
collected a number of *Patrinia* species and these are now cultivated at the National Botanic Gardens, Glasnevin’s adjunct, Kilmacurragh Botanic Gardens, which lies 40 miles south of the Dublin site in coastal east County Wicklow.

The main aim of our 2004 expedition was to retrace Augustine Henry’s route, north of the Yangtze, a journey he completed in the autumn of 1888 (O’Brien, 2011). One of Henry’s (and later E. H. Wilson’s) best collecting grounds was Xingshan (formerly Hsingshan), a mountainous region 120 km north-west of his base at Yichang. Among the commonest perennials in the Xingshan area was *Patrinia heterophylla* Bunge, and there it grew in meadows and by road sides alongside other good perennials like *Anemone hupehensis* V. Lemoine, *Vernonia nantcienensis* (Pamp.) Hand.-Mazz., *Tricyrtis maculata* D. Don, *Chloranthus henryi* Hemsley, *Swertia punicea* Hemsley and enormous colonies of the dainty gentian-relative *Halenia elliptica* D. Don. var. *grandiflora* Hemsley. *Patrinia heterophylla* Bunge, the *mu hui tou*, easily stood out of this colourful medley, forming dense mounds to 90 cm high and at the time of our visit plants were absolutely laden with large, lax corymbs of small butter-yellow, slightly fetid flowers (Henry 1887, 1896).

Augustine Henry collected this species both north and south of the Yangtze River. For example, A. Henry 1657 (K.) was gathered in July 1886 in the Monastery Valley, to the rear of Moji Shan, a pyramidal-shaped hill which lies on the south bank of the Yangtze opposite the historic city of Yichang. This particular collection was described just two years later by the Kew taxonomist William Botting Hemsley (1843–1924) as a new species, *Patrinia angustifolia* Hemsl. and was characterised by its long, narrow entire leaves, but proved to be no more than a young state of *Patrinia heterophylla* Buge (Forbes & Hemsley 1888).

Henry was not the first Western plant collector to find this species however. That honour must go to the Russian botanist Dr Alexander von Bunge (1803–1890), who discovered it in Mongolia during the autumn of 1830 (Bretschneider, 1898a). Earlier that year, on the recommendation of Alexander von Humboldt (1769–1859), Bunge was appointed botanist by the Academy of St. Petersburg on a new Ecclesiastical Mission travelling to Beijing, from whence he made many notable discoveries. (Bretschneider, 1898b)
Plate 761  *Patrinia heterophylla*  

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The next collection of this species was by the famous French Lazarist missionary and plant hunter Père Armand David (1826–1900), who found it near the Emperor’s Summer Palace at Chengde (then Jehol) in Hebei Province in north-east China. From May to November 1864, David spent his time exploring the mountains surrounding the palace complex. Anyone well acquainted with this species will be familiar with its rather rank-smelling foliage and in his *Plantae Davidianae ex Sinarum Imperio*, Adrien René Franchet (1834–1900) quotes the French Father’s experience; ‘*La racine exhale une odeur forte et désagréable*’. (Franchet, 1884)

**Cultivation.** In cultivation *Patrinia heterophylla* sometimes exhales the same unpleasant scent, particularly during damp weather in late autumn; at Kilmacurragh, where we grow it in a large double-sided herbaceous border, we long blamed the odour on cats visiting the gardens (Fig. 1). Despite this single drawback *P. heterophylla* is a first-class garden perennial, being long lived, and certainly, the clone we grow here at Kilmacurragh continues to flower from early July to the end of October and is one of the showiest plants in this area of the gardens. It is a very easy species to cultivate and fully hardy here at Kilmacurragh where plants experienced and survived a minimum temperature of −9°C during the winter of 2010/2011. In a garden situation it thrives best in a sunny border in rich, moisture retentive soil. Extremely easy to propagate from spring-sown seeds or by division of established plants.


**DESCRIPTION.** A robust densely caespitose rhizomatous perennial herb to 90 cm tall, stems ascending and scabrous or subglabrous. Basal leaves in a rosette, petiolate, 6–22 cm, pinnatifid to pinnatisect, consisting of 1–5 ovate to linear-lanceolate segments, the terminal segment normally being the largest. Stem (cauline) leaves thin and papery, petiolate or subsessile, opposite, the lower leaves pinnatisect with two to five pairs of segments, the terminal segment being the largest and ovate to linear-lanceolate, 6–14 cm × 8 cm, apex long...
acuminate. Upper leaves mostly undivided, occasionally with one to two pairs of segments, terminal segment ovate to ovate-lanceolate, crenulated. Inflorescence a lax terminal dichasial cyme, with hispidulous peduncles, subtended by an involucre of one to two pairs of linear segments. Bracteoles winged, to 5.5–6.2 × 4.5–5.5 mm. Calyx lobes ovate to ovate-oblong 0.1–0.3 mm. Corolla yellow, campanulate, tube 2–2.5 mm, 1.5–5 mm in diameter, lobes 5, ovate 1–1.8 × 1.5 mm. Stamens 4, exserted, anthers oblong 1 mm. Ovary ovoid 1–1.5 mm, inferior, three carpellate, but two of the carpels abort to leave a single locule with a single pendulous ovule; style slender, slightly curved 2.5 mm; stigma 2 to 3 lobed, capitate or peltate. Achenes with two persistent bracteoles, oblong, glabrescent or hispidulous, with a truncate apex.

Distribution. Widespread across China from the coastal provinces in the east to western China where it is found on Emei Shan (Mount Omei) in western Sichuan province, for example. Throughout this vast area *Patrinia heterophylla* has an altitudinal range of 100–2600 m (328–8530 ft.).

Habitat. Roadside verges, forest glades, riverbanks and grassy slopes on the edge of mixed temperate forest.

Conservation status. Common, particularly in Central China.
REFERENCES


