

**50th Anniversary of Botany Department
National University of Mongolia**



**Proceedings of International Conference
PLANT BIODIVERSITY AND ECOSYSTEM
SERVICES IN CONTINENTAL ASIA**

**ТӨВ АЗИЙН УРГАМЛЫН ОЛОН ЯНЗ БАЙДАЛ,
ЭКОСИСТЕМИЙН ҮЙЛЧИЛГЭЭ**

Олон улсын эрдэм шинжилгээний хурлын эмхэтгэл

BOTANY DEPARTMENT
SCHOOL OF BIOLOGY AND BIOTECHNOLOGY
NATIONAL UNIVERSITY OF MONGOLIA



THE SENCKENBERG MUSEUM OF NATURAL HISTORY

GÖRLITZ, GERMANY

SENCKENBERG
world of biodiversity

Proceedings of International Conference
Plant Biodiversity and Ecosystem Services in Continental
Asia

June 26-28, 2013

Ulaanbaatar, Mongolia

Notes on the new finding - *Lythrum virgatum*

B. Oyuntsetseg¹, R. Tungalag¹, Ch. Oyundari², D. Nyambayar¹, N. Soninkhishig¹, Ts. Dejidmaa¹, E. Uuriintsolmon¹

¹Department of Botany, School of Biology and Biotechnology, National University of Mongolia, Ulaanbaatar 46, Box 377; ²Department of Geo-Ecology and Environmental study, School of Geology and Geography, NUM
E-mail: oyunaa@num.edu.mn

The Lythraceae are a family of flowering plants, including about 620 species of mostly herbs with some shrubs and trees. There are 31 genera, widespread in tropical regions, and less common in temperate regions. For the Flora of Mongolia, *Middendorfia borysthena* (M.B. ex Schrank) Trautv. was the only known taxon from this family (Gubanov, 1996).

In summer 2012, *Lythrum virgatum* L., a species of Lythraceae, was found in the valley of Bulgan River in Dzungarian Gobi during the botanical expedition of the WaterCope consortium, a Mongolian-Sino-German Research & Development project. *Lythrum virgatum* L. is known from one population in the Valley of Bulgan River. The plant was found among *Halimodendron* bushes at the river bank. Two collections were made. The herbarium specimens are housed (UBU 165; UBU 166) in the Herbarium of Botany Department, National University of Mongolia.

The genus *Lythrum* has a worldwide distribution. It comprises 35 species, native to Eastern Europe and Western Asia. Some species are cultivated as garden ornamentals.

This is not the first report for the genus *Lythrum* in the Flora of Mongolia. As noted in Gubanov's conspectus (1996), *Lythrum intermedium* Ledeb. was brought to the Flora of Mongolia without location data. *Lythrum intermedium* is listed in the Flora of China as a synonym of *L. salicaria* L. which is a more widespread and variable species. The Flora of Kazakhstan (1963) and the Flora of Siberia (1996) also quote occurrences of *L. virgatum* in Mongolia without location data.

The key to the species

- 1 Plants typically sparsely to densely pubescent; leaves ovate-lanceolate to broadly lanceolate, base rounded; epicalyx segments much longer than sepals. *L. salicaria*
- + Plants glabrous; leaves narrowly lanceolate to linear-lanceolate, base cuneate; epicalyx segments shorter to equaling sepals. *L. virgatum*

Lythrum virgatum Linnaeus, 1753, Sp. Pl. 1: 447; Fl. USSR, 1949, 15: 551; Fl. Kazakhstan, 1963, 6: 234; Fl. Siberia, 1996, 10: 106.

Description. 30–80 cm tall perennial herb. Whole plant glabrous. Stem erect, 4-angled. Leaves opposite, narrowly lanceolate to linear-lanceolate, 3–13 cm x 0.3–1.6 cm., base narrowly cuneate, apex acute-acuminate. Inflorescences terminal, spicate, 13–25 cm long; bracts linear-lanceolate. Flowers in 1–3-flowered axillary cymes, solitary or in sparse whorls, shortly pedicellate. Floral tube 4–6 mm x 1–1.5 mm, 12-ribbed; sepals deltate, 0.8–1 mm; epicalyx segments erect, linear to awl-shaped, shorter than or equaling sepals. Petals purple to pink, elliptic-lanceolate or oblanceolate. Capsule elongated.

Ecology. Grows typically on floodplain and bogged meadows, in bogs, at river banks and on pebbles.

Distribution in Mongolia. Dzungarian Gobi. Khovd province, Bulgan soum, Station Yarant. Valley of Bulgan River. N 91°10'29"; E 46°05'23", H-1095 m.

World distribution. Europe, Caucasia, Middle Asia, Iran, Siberia (Western Siberia, Middle Siberia), China (Hebei, Xinjiang)

Economic importance. Often cultivated as an ornamental.

L. virgatum might be invasive. According to the USDA Plants Database, the species is a noxious weed in the US (<http://plants.usda.gov/java/profile?symbol=lyvi3>).

Keywords: new taxon, Lythraceae, Western Mongolia, Dzungarian Gobi, Bulgan River