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INVASIVE PLANT SPECIES AND THE TRANS-SIBERIAN RAILWAY – BACK AND FORTH

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Railways are the ideal habitats for invasive alien species. Frequent disturbances create suitable open patches, destroy native plants, and propagules along the railroad can easily transport for many kilometers. This study is based on the inventory of current flora of Trans-Siberian railway track (Transsib) done in 2020-2021 (planned to continue also in next year). Up to day, European (Moscow–Vladimir–Nizhny Novgorod–Kirov and Moscow–Yaroslavl–Kostroma–Kirov), Siberian (Taishet–Irkutsk–Ulan-Ude) and Far Eastern (Khabarovsk–Dalnerechensk–Ussuriisk–Vladivostok) sections were covered. In European sections of Transsib we found 265 plant species. Invasive species form 11%, 17 of them are included in TOP 100 of the most dangerous invasive species of Russia. At Siberian section of Transsib only 4 species from total of 266 species are in Top-100 of the most aggressive invasive species. In the Far East section, the numbers are 11 out of 210 species. The four invasive species that are found along the whole Transsib from Moscow to Vladivostok, are *Acer negundo*, *Amaranthus retroflexus*, *Erigeron canadensis*, and *Hordeum jubatum*. Our results confirm that the railway serves also as a recipient of alien species: many found species were initially introduced to cities and villages, such as *Heracleum sosnowskyi*, *Erigeron annuus*, or even continuously to be used in landscaping species, e.g. species of the genus *Solidago*. On the other hand, the railway is the main vector of spreading of alien species, e.g. for *Acer negundo*, *Epilobium adenocaulon*, *Erigeron canadensis*. Active dispersal of Asian *Artemisia sieversiana* along railways in the European part of Russia confirms the hypothesis about the leading role of the Trans-Siberian railway in unintentional movement of plants from Asia to Europe.

Key words: Trans-Siberian railway, alien species, invasive species