## INVASIVE PESTS OF *Robinia pseudoacacia* foliage in plantings of the lower volga region, russia

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Woody plants of the generic complex Robinia spp., 1753 are of the great practical importance in the problem of expanding the range of plantings, increasing the decorativeness and durability of plantings in sparsely wooded arid regions. For a long time, plantings of the genus Robinia retained resistance to phyllophages. However, in recent years, insect species alien to the region have occupied stable positions among the entomofauna. Among the identified invasive insects in the plantings of the Lower Volga Region, the most common in the crowns of *Robinia* spp. *Dbolodiplosis robiniae* Haldeman, 1847 (Diptera, Cecidomyiidae) and *Nematus tibialis* (Newman, 1837) (Hymenoptera, Tenthredinidae).

Category of plantings	Number of leaves, pcs.		Including damaged simple leaflets	
	complex	simple	pcs.	%
Obolodiplosis robiniae				
Urban plantatings: parks	32	490	17±0,06	3,47
squares	170	2172	60±1,30	2,76
intra-quarter	83	1126	46±1,35	4,09
urban street	175	2374	34±1,26	1,43
arboretum	10	111	27±0,07	24,3
Forest bands: roadside	152	2055	58±0,01	2,82
field-protecting	140	1866	58±0,01	3,11
water protection	126	1592	498±29,29	31,28
Nematus tibialis				
Urban plantatings: parks	32	490	13±0,01	2,65
squares	170	2172	304±10,86	14,00
intra-quarter	83	1126	28±0,04	2,49
urban street	175	2374	106±0,06	4,47
arboretum	10	111	0±0,00	0,00
Forest bands: roadside	152	2055	254±0,43	12,36
field-protecting	140	1866	178±0,71	9,54
water protection	100	4500	251+12.31	15.77

Obolodiplosis robiniae foliage damage

Nematus tibialis foliage damage

*D. robiniae* prefers to settle in the crowns of trees of intra-quarter and street plantings (14.2-3.8 % and 17.3-5.5 %, respectively). Most simple leaves recorded 1 to 3 galls. In plantings of other ecological categories, galls D. robiniae were rare. Analysis of the localization of galls on a complex leaf showed that gall midge most often forms its terata [10] in the lower (52.0 %) and middle (42.0 %) thirds of the leaf, damaging mainly (in descending order) 4, 5, 1, 2 and 6 pairs of simple leaves.

In recreational landscaping *N. tibialis* prefers tree foliage in intra-quarter planting (27.7% of the examined complex leaves) and squares located near or adjacent to buildings (50.7% of the damaged leaves of the number examined). On average, the density of larvae in the crown of a tree is 2.12 pcs. / leaf.

N. tibialis prefers the foliage of intra-quarter plantings, where on the majority of leaves (27.7 %) it is localized by one larva, and about 35 % of the leaf blades are inhabited by two-three larvae. On trees in arboretums and parks, most leaves are colonized by only one larva (16.8 % and 12.6 %, respectively).

## References

1. Belitskaya M.N., Gribust I.R., Blum K.Ya. Robinia marginal gall midge (*Dbolodiplosis robiniae* Haldeman) in protective plantations of the Lower Volga region // Success of modern natural science. 2020. No. 6. Pp. 7-13 2. De Groot M., Kavčič A. (2017). Robinijeva grizlica, Nematus tibialis, nova tujerodna vrsta v Sloveniji // Novice iz varstva gozdov Vol. 10. Pp. 25 – 26