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ANALYSIS OF HOST-PLANTS THAT ARE AFFECTED BY RUST PLACED IN LEZHNEVO DISTRICT, IVANOVO REGION

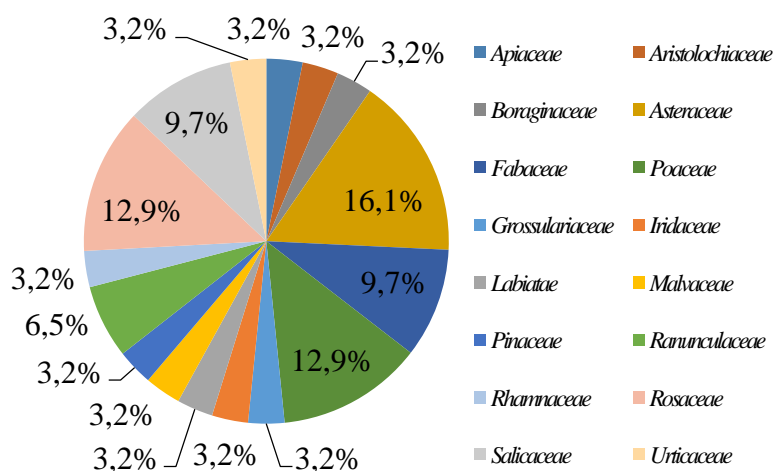
Today, the issue of biodiversity of parasitic fungi, notably rust fungi, is of great interest. Rust fungi grow on *Embryophyta* of many families and cause serious harm. Large amounts of plants are affected, including vegetable, flower, fruit and cereal crops.

The rust quickly adapts to fungicides, therefore, it is essential to improve methods of combating the disease at all its stages. Finding out what host plants are particularly vulnerable to rust fungi will help combat the spread of the parasites.

The research took place in the Lezhnevo district located in the southwest of Ivanovo Oblast; it was carried out from 2017 to 2019.

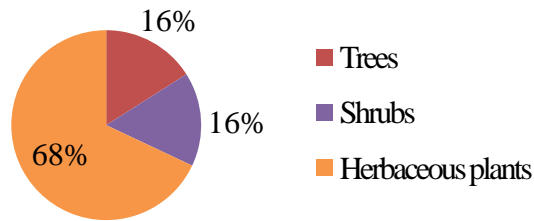
During the research, 31 species of rust fungi-affected *Embryophyta* from 28 genera and 16 families were analyzed.

The systematic analysis of the floristic composition of the host plants showed that the most vulnerable species are members of the following families: *Asteraceae* (5 species, 16%), *Poaceae* (4 species, 13%) and *Rosaceae* (4 species, 13%). Other families are represented on the pie chart below.



Ratio of host plant families

Thus, the symptoms of the disease most frequently appear on herbaceous plants (68%) rather than on shrubs (16%) or trees (16%). This ratio are presented on the pie chart below.

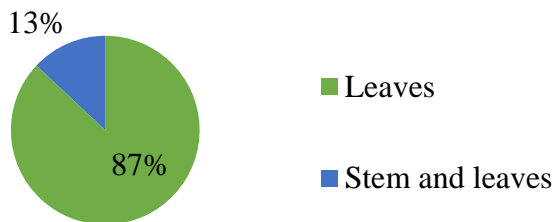


Ratio of plants in accordance with the life form

In herbaceous plants, perennials (72%) are clearly predominant, in contrast to annuals and biennials (14%).

Presumably, this can be explained by the fact that the aforementioned life form is predominant.

Our next research task was the study of organotropic specialization of rust fungi. We found out that all the host plants had their leaves infected by fungi, while only four species of the *Poaceae* family contained fungi on both the stem and the leaves. This ratio is presented on the pie chart below.



Ratio of species of rust fungi by organotropic specialization

One of the merits of our study was the discovery of a new species of rust fungus *Coleosporium telekia* on *Telekia speciosa*. Probably, the discovery of a new species is associated with the characteristics of the spread of the plant. *Telekia speciosa* in recent years has been actively distributed as an alien plant.

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