

STUDY OF *RHINONCUS PERICARPIUS* L. (CURCULIONIDAE) BIOLOGY, AN IMPORTANT PEST OF 'HERB PATIENCE' AND RHUBARB IN ROMANIA

Traian Manole

The new agricultural reform policy, which involves an upward trend in the organic farming system of medicinal and aromatic plants, but also plant protection program, raises more and more complicated problems. The protection of organically grown medicinal plants varies according to whether or not the interests of farmers are compatible with the need for introducing these plants grown in the production system. For farmers who cultivate large-grain leafy plants, spontaneous species of the genus *Rumex* are considered weeds and control measures are taken against them. For those who cultivate *Rumex* species for food or medical purposes, the protection of these crops raises a number of issues. The common denominator of this controversy is, for some, and for others, the possibility of biological control using biological agents represented by insect species of the Curculionidae family. The flora of Romania includes 25 species and 12 subspecies of the genus *Rumex*; among them only two species, *Rumex patientia* L. and *R. rugosus* Campd, are cultivated in small individual farms. Species of the genus *Rumex* are widely distributed on Romanian territory, although each species has specific life requirements. Corresponding to the species of the genus *Rumex* and *Rheum* are insect species that feed on different plant organs and cause varying degrees of attack. Many of these species are part of two genera of the Curculionidae family: *Apion* and *Rhinoncus*. Five species belonging to the *Apion* genus have been reported in Romania's fauna: *Apion frumentarium* Payk, *A. miniatum* Germ., *A. cruentatum* Steph., *A. sanguineum* DeGeer and *A. rubens* Steph. Only one, *A. miniatum*, which is spread throughout the country, could be used in the biological control of spontaneous *Rumex* species, or may be considered an important pests for cultivated species. Another important pests belong to the *Rhinoncus* genus, are three of the eight species occurring on *Rumex acetosa* L., namely *Rhinoncus pericarpus* L., *Rh. castor* F. and *Rh. bosnicus* Schultze, the last one very rare, was not found in the southern investigation areas.

To assess the importance of *Rh. pericarpus* species both as a harmful species and as a biological control agent, the results obtained in the present paper, refer to the growth of the species under laboratory conditions on natural food. The work brings new data on the feeding trophic range, attack model, incubation duration, fecundity of the female and fertility of the eggs, the active duration of the female and the duration of the growth of the larvae, pupae and diapauses, as well as the spread on the Romanian territory.

Key words: *Rhinoncus pericarpus* L., medicinal and aromatic plants, life cycle, laboratory mass rearing