

## GLOBAL WARMING CAN INCREASE FLEA BEETLES ATTACK ON OILSEED RAPE, IN LATE AUTUMN, IN SOUTH-EAST ROMANIA

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### Abstract

This is the first reference from the Romanian literature about cabbage flea beetle (*Phyllotreta atra*) attack on oilseed rape crop in late autumn, in November, in the country's south-east. Also, in the same period, it registered a higher attack of the cabbage stem flea beetle adults (*Psylliodes chrysocephala*). The research was carried out in the autumn of 2021 at the NARDI Fundulea experimental field, located in Călărași County, south-east of Romania. Oilseed rape was sowed on 22 September, but full plant emergence was recorded on 27 October because of the drought. The assessments concerning flea beetle attacks were made at the end of October and during November. As a result of the higher temperatures recorded in November, the flea beetle attack at untreated plants, on an OEPP intensity scale from 1 to 5, was 2.69, while at variant with seeds treated with cyantraniliprole (625 g/l) active ingredient, the attack was 2.01. Also, there was recorded high attack of the cabbage stem flea beetle adults, both at treated and untreated plants. On 12 November attack degree of the pest at OSR untreated plants was 29.89%, while at seed treated plants was 19.27%. On 19 November, the attack of the cabbage stem flea beetle adults at OSR untreated plants increased to 31.38%, while in the case of seed treatment plants, the attack degree increased slightly, to 19.66%. The weather conditions from the autumn of 2021 it have recorded high attacks of these two flea beetle species. Seed treatment has consequences in reducing this pest attack after plants' emergence; however, the invasion of the cabbage stem flea beetle adults was high in the treated variant too.

**Key words:** oilseed rape, pests, autumn, global warming