



Fertilizarea plantelor de rapiță afectate de înghețurile târzii

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Many Romanian farmers consider oilseed rape a risky business, due to the sensitivity of this species to the temperature alternation (late frosts during the end of winter and the first days of the spring season [1]. In the last 15 years, crop fertilization has been a weak point in crop production in Romania. Due to the lack of funds, many Romanian farmers are using sometimes only foliar sprays because they are cheaper and easier to apply [2]. Some scientists reported that only 40 kg fertilizers (active substance) are used in Romania per hectare of arable land. Nutrients application in oilseed rape fertilization has to be split according to plant development. The aim of this paper was to find the most efficient nutrients doses that have to be used in oilseed rape crops affected by late frosts. The experiment was conducted under field conditions in Belciugatele, Calarasi County. We have used 3 replications for each treatment which were set up in 3 randomised blocks. The following treatments were applied on 27th of April: V1 - control (no fertilization), V2 – foliar nutrient application using the product Agrofeed 19:19: 19 + microelements, 5 kg/ha and V3 – mineral fertilization using 60 kg N/ha and 30 kg P₂O₅ and foliar application of Agrofeed 19:19: 19 + microelements, 5 kg/ha. On 27th of April plant biomass yielded 756 g/ m². Plant biomass increased during the vegetative season, according to treatment. Until 26th of June, plant biomass increased with 67 g/ m² (9% increase) in control, with 275 g/ m² (25% increase) in V2 and with 1830 g/ m² (242% increase) in V3. Pod number/m² has varied from 1428 (V1) up to 4068 la V 3, increasing amount being 32% in V2 and 185% in V3 treatment. Evaluated seed yield was 944 kg/ha in control, 1102 kg/ha when foliar nutrient was applied and 2381 kg/ha when mineral nutrients and foliar sprays were used. In order to obtain a profitable yield, moderate quantity of nutrients has to be applied to the oilseed rape affected by late frost. Using only foliar treatment was not a profitable solution in our case, because yield increase was small, only 157 kg/ha, comparing to 1437 kg/ha, when mineral fertilization and foliar treatments were applied.