

OIL-SEED RAPE PLANT RESPONSES TO THEIR FLOWER BUDS
INJURY BY POLLEN BEETLES MELIGETHES SPP.

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Chemical control of *Meligethes* spp. on winter rape crops in the most European countries is recommended at the level 5-6 beetles per plant.

The infestation and the damage of winter oil-seed rape crop by pollen beetles was studied in 1982-1984 at the Wroclaw area. The rape plants at the part of experimental field with permanent control of *Meligethes* spp. and at the unprotected one were compared. The infestation of crop was very high; peak number has reached 13, 26, 10 beetles per plant respectively in consecutive years. Adults caused injury by feeding on flower buds and leaving podless stalks. The study of pod setting has shown that on unprotected plants only at the beginning of the process there were 2-3 times less of pods than on protected ones. In two weeks the number of pods on protected plants was naturally reduced while on unprotected ones the new pods were set two weeks longer and the maximum of pods was 10 per cent higher. During the harvesting the number of pods in both cases was the same and there was no significant difference in the yield of seeds, therefore the compensation has been occurred. The possibility of compensation was indicated at the separately grown single plant, where more than 6000 flower buds has been produced.

The others observations were concerned with pod setting from the buds injured by females laing eggs. It was found that injured buds can set pods even more often than uninjured ones, because there has not been caused a total destruction of buds by larvae^{but} only their male sterility.

The implications of the above plant responses for the economic threshold are discussed.