

**Project Title** : The Determination of Weed Species and Investigation of Weed Control Management Strategies in Parsley, Rocket, Dill and Cress in Production Areas of İzmir Province

**Start Date** : 2014

**Supporting Body** : GDAR

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**Summary** : Parsley, rocket, dill and cress, which are vegetables whose leaves are consumed, have an important place and effect on human nutrition with their vitamins and minerals. İzmir province is in the first place for the production of parsley, rocket, dill and cress in Aegean Region with 3606 tonnes of total production. One of the most important problems in the production of parsley, rocket, dill and cress is weeds. Weeds cause decrease in yield by competition with vegetables, cause loss of quality by mixing with product and therefore cause economic losses. It is mandatory to control weeds to decrease the amount of these losses. At recent years, vegetable producers are having problems with controlling weeds and need suggestions to new ways of control. Studies for the solution of these problems are demanded.

In this study, which was designed to solve these problems, determination of the weeds types, concentrations in production areas of parsley, rocket, dill and cress and constructing programs for control were aimed. With this purpose the study will be conducted in Kemalpaşa, Menemen and Torbalı districts of İzmir province, which have the most planting areas, in 2014-2016. After the surveys, field experiments aimed for control will be conducted. The experiments will be configured as randomized complete blocks with 6 factors and 4 iterations. Fighting the fight in mechanical, chemical, and alternative methods will be given.

At the end of the study; species, density and occurrence frequency of weeds in the productions areas of parsley, rucola, dill and cress will be determined and also the effects of weeds on yield and quality will be put forward. Recent agricultural practices of the producers will be determined with a questionnaire. Likewise with the studies for control of weeds, new programs, which will include alternative control methods, will be devised and the results will be evaluated for integrated product management and organic agriculture.