



HUNGARY

NATIONAL STUDY

AGROECOLOGICAL WEED MANAGEMENT FOR ORGANIC FARMERS

Agronomic practices and management decisions can have a significant impact on the type and number of weeds on a farm. Understanding this relationship can help organic producers manage weeds through avoidance, and various cultural management practices.

The most important steps of non-chemical weed management are prevention, diagnosis, and a number of control methods. Effective weed management depends also on the thorough understanding of the biology and growth habit of weed species.

BIOLOGICAL CONTROL

The biological control agent, normally a fungus or insect, reduces the vigour and competitive ability of the weeds.

AGROTECHNICAL METHODS

Different agrotechnical methods, such as crop rotations, false seedbed techniques, crop density, harvesting time of the cultivated crop, nutrient supply, covering or mulching the soil surface, or solarization are used for weed control purposes. However, these do not only help to destroy weeds, but have a positive effects on the development of the crop.

PHYSICAL WEED CONTROL

Physical weed control is our most commonly known tool in weed management.

Within this category we use the mechanical effects of mechanical weed control against weeds, which can be cutting, or uprooting. Mechanical weed control in organic agriculture starts already in the stubble of the forecrop, in the course of the basic soil cultivation in the produced crop.

The equipment of physical weed management is various: for soil tillage, farmers can use winter ploughs, discs or rotary tillers, different cultivators which cut the roots of weeds and cover the

germinating weeds with soil. As for harrowing there are chain, weed, tooth or power harrow.

Thermal weed control use thermal effect against weeds. Different methods of thermal weed control are used in practice, the most widely known is weed flaming with an effectiveness of ~ 80-90 percent. However, due to its high energy-costs, its application is acceptable only in horticulture

PRECISION AGRICULTURE

Precision technology is the future of the weed management in the agriculture. In the picture below the farmer is setting the solar powered automatic weed killer.

SUMMARY

Management of weeds in organic systems is a long and complex process, requiring a high level of management. To ensure the success of the organic farm, it is critical to know what types of weeds are present and understand effective management techniques. It is also important to realize there may be some weeds that cannot be managed or tolerated in an organic system, and these should be avoided. An organic system that is diverse and well managed can be highly productive and in harmony with the surrounding areas.

It is the Hungarian way for the agroecological weed control in organic farms promoted by the Association for Hungarian Organic Farming (MÖGÉRT/AHOF).

