

REDUCTION OF PESTICIDE EXPOSURE WHEN USING INTEGRATED PRODUCTION SYSTEMS

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Integrated production has been regulated in Spain since 2002, and currently includes a diverse range of crops covering about 500,000 hectares. The use of crop production techniques methods that consider the needs of society, the profitability of the crop and the protection of the environment, results in a reduction in the use of traditional chemical pesticides. Following integrated production techniques allows growers to provide agricultural products of high quality, which is one of the key elements demanded from modern agriculture.

Agricultural enterprises interested in adopting integrated production systems, must be registered and obtain accreditation to demonstrate that they comply with the required conditions. Compliance with the requirements of integrated production is achieved using a competent technical service responsible for the evaluation and control of agricultural enterprises following integrated production systems, and an accredited certification authority. There are technical regulations that define the agricultural practices that are essential, prohibited or recommended for each particular crop. The use of labelling and identity markings is also controlled, as these allow the consumer to distinguish the different products on sale, and which ones have been produced following the correct integrated production standards.

Included in the general requirements of integrated production defining agricultural practices that must be followed, there are references to integrated pest management (IPM). This requires that before chemical control methods are considered, the grower must investigate alternative control methods such as biological control, biotechnology, cultural, mechanical or genetic. The list of requirements for IPM make reference to aspects such as the selection of active ingredients, plant protection products, qualifications of the operator, the correct functioning and servicing of the application equipment used for pesticides, including the need for regular inspection and calibration. These are essential requirements for all crops to follow Good Agricultural Practice established by the European and Mediterranean Plant Protection Organisation (EPPO).

The quoted standards for IPM that are compulsory, together with a list of prohibited activities, contribute to a reduction in the risks associated with the exposure of workers to pesticides.