

Inventory: The Pesticides Application and Its Risk Assessment in the Gharb Plain - Morocco

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Abstract

The Gharb area (upstream of the Merja Zerga lagoon, known as the Ramsar Wetland since 1980) is a very important area of agricultural activity, which could expose it to the risk of contamination and pollution of air, water and soil, as well as endanger the ecological system of the area.

In addition, the inventory and analysis of the results of the surveys carried out on 100 well-targeted farms, covering an area of 555 ha and completed by a survey of 71 pesticide resellers, allowed part of, revealing the strong use of pesticides in quantity (13.6 kg / ha), and on the other hand, to note that high value-added cultivation techniques do not exert a strong phytosanitary pressure on the environment.

In addition, the data collected helped us evaluate by indicator calculation (FTI) the pressure of pesticides on the environment while analyzing the farming practices specific to each crop. Thus, the results of the survey show that banana is the crop that undergoes the most phytosanitary treatment registering an IFT of 38, in terms of the total consumption of pesticides identified; orange trees have taken the lion's share compared to other crops practiced in the study area.

Keywords

Gharb, agricultural practices, pesticides, phytosanitary pressure, frequency of treatment indicator (FTI), risk assessment, water, soil, environment.