University of Zabol
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Dissertation for Ph.D Degree in Agricultural Economics

Title
the effects of using chemical chemical inputs on environmental indices of pistachio production (Case study of Kerman province)

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Abstract

Study of environmental indicators related to chemical inputs is one of the necessities of formulating strategic plans for environmental protection of agricultural and horticultural products. Accordingly, this study investigated the effects of using chemical chemical inputs on the environmental indicators of pistachio production. For this purpose, the collected data were collected in the field in Kerman province. Most pistachio-growing areas of Kerman province included Sirjan, Rafsanjan and Zarand. The required data were collected in two sections related to farmers and environmental experts. The methods used to investigate the subject were fuzzy hierarchical decision making, structural equations with partial least squares approach as well as polynomial logit regression approach. The sample of experts under study for the hierarchical decision-making department was equal to ٥٠ people. Also, the sample under study was partial least squares and hierarchical regression included ٣٧٣ people. The findings showed that the highest priority for fuzzy hierarchical calculations was related to soil pollution caused by the use of chemical inputs with a fuzzy coefficient of ٠,٠٨. In other words, the highest priority of the study was related to soil pollution caused by the use of chemical inputs. In the structural equations section, significant relationships were established between the variables studied in the study and the extension factor had a coefficient equal to ٠,٤٣, in other words, it can be expected that by performing extension activities, the level related to management plans can be reduced. Improved the environment by up to ٤٣٪. Also, the study of multiple logit regression showed that the use of chemical inputs, the degree of their satisfaction and also the risk aversion associated with them were effective on various indicators of environmental pollution, import and export and management maps. All effect coefficients were significant at the level of significance less than ٠,٠٥. And considering that in pistachio fields of Kerman province, more insecticides than pesticides and fungicides cause environmental pollution in the region and the role of import and export was significant, so it is suggested that tobacco extract instead of insecticides that pollute The environment of pistachio fields and human health are effective.

Key words: Chemical inputs, environmental pollution, environmental indicators, pistachio production