## Knowledge of agricultural extension agents on safe use practices of herbicides for maize crop in some governorates of Egypt

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## **Abstract**

The main objective of this study was identifying the level of the respondents 'opinions towards the mistakes of farmers' use of Dura herbicides, as well as determining the level of their knowledge, and determining the contribution of agricultural extension in educating farmers about the practices of safe use of herbicides from their point of view, and to identify the problems that respondents face when educating farmers about the use The safety of maize herbicides and their proposals to address these problems, and to determine the correlation between the degree of respondents' knowledge of practices for the safe use of maize herb crops and the studied independent variables.

This study was conducted in three governorates of Upper Egypt, namely: Assiut, Sohag, and Qena, and a simple random sample was drawn from the surveyed agricultural extension workers, whose total was 232 research agricultural researchers, calculated using the Crissy and Morgan equation. The data were collected using the questionnaire in the interview.during April and May 2019, and the results were presented using retation, percentages, weighted average arithmetic, and simple correlation coefficient by using the computer using the statistical programs of social sciences SPSS.

## The most important results shawed the following:

1- (9.48%) from the respondents had high knowledge of the safe use practices of herbicides for maize crop, while it was found that

- (34,05%) from the respondents had medium knowledge, while the percentage (56,47%) of Subjects with low knowledge.
- 2- The most safe use of herbicides for maize crops is to educate farmers about how to behave when the pesticide is spilled on the ground with a weighted average of (2.38) and a relative average of (59.5%), followed by educating the farmers of the damage resulting from storing pesticides in homes with an average Weighted by (2.27) and a relative average of (56.75%).
- 3- (86,21%) from the respondents believe that the degree of the contribution of agricultural extension in educating farmers about safe use practices of herbicide for maize crops is medium, and (1.72%) from the respondents believe that the degree of the contribution of agricultural extension to educate farmers Practices for safe use of maize herbicides are high, while (12,07%) of agricultural respondents see practices for safe use of herbicides for maize crop was medium.
- 4- The most important contributions of agricultural guidance in educating farmers about the practices of safe use of herbicides from opinions the respondents to educate farmers about how to behave when the pesticide is spilled on the ground with a weighted average of (2.38) and a relative average of (59.5%), educating farmers about the damages resulting from storing pesticides Homes with a weighted average of (2.27) and a relative average of (56.75%).
- 5- The most common problems facing the respondents werethe widespread prevalence of fraud with pesticides on the market and weak control over them with a weighted average of (2.60) and a relative average of (86.7%), followed by a lack of training courses in the safe use of maize pesticides with an average Weighted by (2,40) and relative average (80%), then the old customs and traditions that farmers

- adhere to and don,t accepting what is new with a weighted average of (2.33), equivalent to a relative average of (77.7%).
- 6- The most suggestions for overcoming problems were to provide the sufficient number of agricultural specialists in the field of weed control at a rate of (84.5%), followed by holding training courses in the field of controlling maize weeds at a rate of (81.3%), then caring for the maintenance of the center halls Guidance and well equipped so that the guiding sessions and seminars can be held at a rate of (79.7%).
- 7- There were a positive correlation between the degree of knowledge of the agricultural extension in the practices of safe use of maize herbicides and both age, (the number of years of work in agricultural extension) and training, exposure to information sources at the level of significance 0.01, and the presence of a positive correlation between the degree of extension knowledge Agriculturalists researched the practices of safe use of herbicide for a crop and the educational gualification is at level of significance 0.05.