

"Farmers' Knowledge of Recommendations for Producing Organic Fertilizer from Rice Hay in Gharbia Governorate"

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Abstract

The research aimed to determine the degree knowledge of the respondents about the recommendations for producing organic fertilizer from rice hay, determine their benefit of these recommendations, identify the challenges they face in organic fertilizer production from rice hay, explore their proposed solutions to overcome these challenges, and determining the relationship between their knowledge of recommendations for organic fertilizer production from rice hay and the studied independent variables. The research was conducted in some villages Gharbia Governorate and data were collected from a sample of 363 rice farmers by using a personal interview questionnaire in July and August 2023. Data analysis and presentation involved numerical frequencies, percentages, weighted averages, and Pearson correlation coefficient.

The most important results were the following:

- More than two-fifths of the respondents (41.9%) of the total respondents have an average level of knowledge about recommendations for producing organic fertilizer from rice hay.
- There is a direct significant relationship between the variables of educational status, the degree of exposure to information sources of the respondents, and the degree of their knowledge of recommendations for producing organic fertilizer from rice hay.

- There is an inverse significant relationship between the variables of age, the area cultivated with rice, the number of years of cultivation rice, the number of farm animals of the respondents, and the degree of their knowledge of recommendations for producing organic fertilizer from rice hay.
- Over 41% of participants were classified as having a moderate level of benefit from recommendations for organic fertilizer production from rice hay.
- The main problems faced by participants in organic fertilizer production from rice straw were the unavailability of necessary balers for straw compression (93.4% of participants) and the inadequacy of machines for chopping and cutting rice hay for recycling (91.1% of participants).
- Participants' top suggestion was to provide the necessary balers for compressing rice straw through agricultural cooperatives, mentioned by the majority (94.2%). The second suggestion was to provide machines for chopping and cutting rice hay through agricultural cooperatives (92.3% of participants)

Key words: Farmers' knowledge, Organic Fertilizer, Rice Hay.