



Research Article

KNOWLEDGE OF FARMERS ABOUT NEEM COATED UREA (NCU)

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Abstract- The study was conducted to know Extent of Knowledge about use of neem coated urea (NCU) in crop production among farmers of Jamnagar and Devbhumi Dwarka district. The According to ICAR guideline, 10 villages randomly selected from different location of the district, 10 farmers from each villages were selected for this study. Total 100 farmers were selected by proportionate random sample method. The data were collected by personal interview of the farmers. The sizes of land holding of farmers were 4, 19, 35 and 42 per cent marginal, small, medium and big farmers, respectively. 90 % farmers are heard about NCU; 87% aware with benefit of NCU over plain urea; 81% farmers using NCU; 73 % know use of NCU in less quantity as compare to plain urea; 85% farmers aware about NCU from input or cooperative dealers. Thus, according to view of farmers NCU more convenient and it will replace plain urea from market for more benefits in farming.

Keywords- Neem coated urea, Urea, Knowledge level

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Introduction

Urea is the most popular nitrogenous fertilizer among the farmers because of its low cost and easy availability. But the major disadvantages of urea are its high solubility in water and it is very much susceptible to nitrogen loss through various pathways like leaching, ammonia volatilization, nitrification and denitrification. Among these ammonia volatilization is happened to be the dominant loss mechanism because of conventional method of fertilizer application (wet soil surface broadcasting) followed by the farmers encourage it [1].

Urea is widely used as a fertilizer because of its high nitrogen content (46.6%). Unfortunately, urea is very water soluble and in regions with high precipitation the fertilizer may be leached from the soil before plants have an opportunity to assimilate it. Allison (1955) and Lundt (1971) [2,3] have reported that as much as 75% of the nitrogen may be lost in areas with high, intermittent rainfalls. Such losses result not only in increased costs, but they also contribute to the contamination of local waters. Although urea losses can be minimized by the repeated application of smaller fertilizer quantities, the associated with repeated spreading are often high. One approach to the problem is to encapsulate the fertilizer granules with shells, which have low water permeability. For reduction of such losses neem oil is the one of the important substance for minimize the volatilization of the urea. It helps in slow release of nitrogen from urea. Now a days many company prepare neem coatd urea. Since last time it also produce neem coated urea which material import export through sea. Therefore, present study was carried out knowledge about neem coated urea and its importance in maximum benefit from urea.

Objective

To know extent of knowledge about use of neem coated urea (NCU).

Materials and Methods

The study was undertaken by Krushi Vigyan Kendra, Junagadh Agricultural

University, Jamnagar in Jamnagar and Devbhumi Dwarka districts of Gujarat state. According to ICAR guideline, 10 villages were randomly selected from different location of the two district viz., Hadiyana, Gorakhdi, Dhaturiya, Sumara, Jashapur, Dadiya, Karana, Dungrali Devliya, Pipartoda and Bharatpur. 10 farmers from each villages were selected for this study. Total 100 farmers were selected by proportionate random sample method. The data were collected by personal interview method and simple percentage method was used for analysis of data statistically to reach at meaningful results and conclusion.

Results and Discussion

Table-1 Distribution of the respondents according to their Land holding

Sr. No.	Land holding	Percentage
1	Marginal (up to 1.0 ha)	4
2	Small (1.01 to 2.0 ha)	19
3	Medium (2.01 to 4.0 ha)	35
4	Large (more than 4.0 ha)	42

The data in [Table-1] indicate that (42%) of the farmers were large farmers followed by medium farmers (35%) and small farmers (19%). Only (4%) of them were marginal farmers. it can be concluded that majority of the farmers owned land more than 2.0 hectares.

It can be extracted from [Table-2], that 90 % farmers are heard about neem coated urea; 87 per cent aware with benefits of neem coated urea over plain urea and they have knowledge about neem coated urea available in market; 81 per cent farmers using neem coated urea and having knowledge about neem coated urea reduce the quantity of urea; 80 per cent farmer used neem coated urea in crop and get benefits; 73 per cent know use of neem coated urea in less quantity as compare to plain urea; 85 per cent farmers aware about neem coated urea from input or cooperative dealers; 84 per cent give view about plain urea should be replace with neem coated urea completely or both should be available in

market. Thus, according to the view of farmers neem coated urea more convenient and it will replace plain urea from market for more benefits in farming.

Table-2 Knowledge of farmers about neem coated urea (NCU)
n = 100

Sr. No.	Particular	Percentage
1	Whether you have heard about Neem Coated Urea (NCU)	90
2	Whether you are aware of benefits of Neem Coated Urea (NCU) over plain urea (U)	87
3	Whether you are using Neem Coated Urea (NCU)	81
4	If used, any benefit of Neem Coated Urea (NCU) in crop	80
5	Whether you have used less quantity of Neem Coated Urea (NCU) in his field compared to plain urea	73
6	Whether input dealer or cooperative dealers has told you about benefits of Neem Coated Urea (NCU)	85
7	Whether Neem Coated Urea (NCU) is available in market	87
8	Whether you think Neem Coated Urea (NCU) will reduce the quantity of urea used	81
9	In your view, whether urea should be replaced by NCU completely or both should be available in market	84

Conclusion

From above result and discussion, it could be concluded that, majority of the farmers owned land more than 2.0 hectares, 90% farmers are heard about neem coated urea; 87% aware with benefits of neem coated urea over plain urea; 81% farmers using neem coated urea; 80% farmer used neem coated urea in crop and get benefits; 73% know use of neem coated urea in less quantity as compare to plain urea; 85% farmers aware about Neem coated urea from input or cooperative dealers. Thus, according to the view of farmer's neem coated urea more convenient and it will replace plain urea from market for more benefits in farming.

Conflict of Interest: None declared

References

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