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Research Paper

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Correlation of knowledge of soybean cultivation practices

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ABSTRACT

The present research study was conducted in 15 villages comprising of 5 villages each from Buldana, Chikhli and Mehkar Panchayat Samitis of Buldana District of Vidarbha region of Maharashtra State to ascertain the knowledge of recommended cultivation practices of soybean by the farmers. Majority of the respondents had a high level of knowledge of cultivation practices recommended for soybean. Recommended practices like preparatory tillage, method of sowing, sowing time, proper hoeing time, soil type, high yielding varieties, sowing depth and recommended intercropping requirement for soybean were known to most of the farmers. As regards the variation in the area under soybean crop almost all the farmer/ respondents shifted over soybean from cotton and jowar and cotton in particular. The findings of the relational analysis revealed that out of fourteen characteristics studied, eleven variables namely education, land holding, occupation, soil type, annual income, cropping pattern, experience in soybean cultivation, social participation, socio-economic status, extension contact, scientific orientation were positively and significantly correlated with the knowledge of soybean growers about soybean cultivation practices. The findings of the regression analysis revealed that all the fourteen independent variables contributed 53.03 per cent influence in adoption of the respondents.

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Soybean in Indian agriculture as a pulse and oil seed crop has attained importance due to its nutritional and industrial value. It occupies an important place as it gets more foreign exchange from the export of soya powder due to its greater demand in the international market. It is highly nutritious food item, as it contains 20 per cent oil and 40 per cent protein. In addition, it also contains 21 per cent carbohydrates, 11.5 per cent iron, 4 per cent mineral salts like calcium, phosphate and many important vitamins too (Damordjati *et al.*, 1996).

Soybean crop is originated from China. In India it is cultivated in the states of Madhya Pradesh, Maharashtra, Rajasthan, Andhra Pradesh, Karnataka and Chattisgarh. Maharashtra is the second largest soybean growing state in the country. From the statistical information available, it is surprising to note that the area under cotton and other crops is decreasing and the area under soybean is increasing practically every year in Vidarbha region.

Soybean cultivation has become more prominent in Buldana district, in Buldana, Chikhli and Mehkar Panchayat Samitis in particular from last 14 years as it fetches higher price and less input requirement and therefore, it has replaced the crops like cotton, sorghum, used, mung etc. to some extent.

RESEARCH PROCEDURE

The area under soybean crop is increasing gradually year after year. Hence, there is a need to increase the average yield of soybean. The present investigation, therefore, aims to ascertain the factors responsible for adoption of improved cultivation practices of soybean by the farmers.

The study was carried out in purposively selected Buldana, Chikhli and Mehkar Panchayat Samitis of Buldana district of Vidarbha region in Maharashtra State, as the area under soybean crop is increasing every year and topping the list of Panchayat Samiti in rank order of first, second and third, respectively.

Out of the 13 Panchayat Samitis in Buldana district, Buldana, Chikhli and Mehkar Panchayat Samitis were selected considering the increasing trend of soybean area since last eight years, and ranking first, second and third in soybean area as compared to other panchayat samitis. From each of the three panchayat samitis thus selected five villages were considered for study. The total sample