

## A study on knowledge and adoption of soybean production technology among the farmers in Hingoli district of Maharashtra

T.S. MOTE AND D.W. WADNERKAR

### ABSTRACT

The study was conducted in twelve villages of Hingoli and Sengaon Talukas of Hingoli district (M.S.). Most of soybean growers were middle aged, educated upto secondary level, having more than five members in their family and medium level of social participation. Maximum farmers cultivated soybean between 2.1 – 4.0 ha having medium size of holding and annual income. The independent variables like age, education, family size, social participation, area under soybean cultivation, land holding, annual income, sources of information used, extension contact and knowledge had shown positive and significant relationship with adoption. Out of the total ten calculated adoption indices, the highest was for harvesting (91.2 %) followed by preparatory tillage (89.69 %). Non-availability of farming machinery and equipment, high charges and non-availability of labour at proper time, high cost of plant protection material and their skillful application, their risk in handling and load shedding have been categorized as a main constraints in adoption of improved soybean production technology.

See end of the article for authors' affiliations

Correspondence to :

**T.S. MOTE**

Department of  
Agriculture,  
Maharashtra State,  
NAGPUR (M.S.)  
INDIA

### INTRODUCTION

Improved agricultural practices are the products of modern science and technology. Development of new technologies is generally not major problem in our country, the main problem as it exists today is that of an acceptance of these techniques by the farmers. Though soybean is assuming prime importance in oilseed and pulse crop among the farming community, there exists a wide gap between average yield of common farmers and actual potential of the crop. This demands urgent attention to the problems encountered by farmers. Keeping in view the low yield of soybean at farmers level, it was realized to know the level of knowledge and adoption of soybean with respect to production technology with the objectives : to study the personal, socio-economic, communication and psychological characteristics of the soybean growers, to study the knowledge and adoption of soybean growers about soybean production technology, to study the relationship between selected characteristics of the soybean growers and adoption of soybean production technology, to identify the constraints faced by the soybean growers in adoption of soybean production technology.

### METHODOLOGY

The present study was carried out in two talukas *i.e.* Hingoli and Sengaon of Hingoli

district of Marathwada region (M.S.) during the year 2007-2008. From each taluka six villages were selected randomly on the basis of maximum area. On the basis of objectives, questionnaire was finalized by pre-testing and data were personally collected by the investigator. Adoption was the major dependent variables and age, education, social participation, family size, land holding, annual income, knowledge, extension contact, sources of information were the independent variables of the study. The independent variables were measured with the help of standardized scale. The adoption index was calculated by using following formula :

$$\text{Adoption index} = \frac{R - A}{R} \times 100$$

where,

R = Adoption index of particular package of practices

A = Actual use

The various statistical tools like frequency, percentage means, standard deviation, coefficient of correlation and multiple regression were used.

### RESULTS AND DISCUSSION

*Personal, socio-economic, psychological and communication characteristics of soybean growers:*

It was observed that maximum soybean

### Key words :

Soybean,  
Production  
technology,  
Adoption

Accepted :  
March, 2009