Resource productivity, resource use efficiency and optimum resource allocation in jasmine flower production

B.R. PAWAR* AND D.B. PAWAR

Department of Agricultural Economics, Marathwada Agricultural University, PARBHANI (M.S.) INDIA

ABSTRACT

Jasmine (*Jasminum sambac*) is mostly cultivated on commercial scale in Nanded district of Maharashtra and it is popularly known as mogra. Investigation was carried out during the year 2004-05 to study resource productivity and resource use efficiency in jasmine flower production in the district. In all sixty mogra gardens were selected for the investigation. Cross sectional data were collected from sixty mogra growers by personal interview method with the help of pretested schedule. The results revealed that the value of R² was 0.861 which indicated 86.10 per cent of variation in mogra flower production due to variation in six explanatory variables in estimating Cobb-Douglas production function. If use of area of mogra garden, human labour, nitrogen, phosphorus and manure were increased by 1 per cent each, that will lead to increase in the mogra flower production by 0.313, 0.288, 0.022, 0.040 and 0.090 per cent, respectively. The existing size of mogra garden was 0.39 hectare while optimum size of it was found to be 0.73 hectare. When other resources remained constants, the optimum use of human labour, nitrogen, phosphorus and manure was 287.37 man days, 107.60 kg, 106.43 kg and 74.83 q, respectively. On the contrary, production elasticity of potash input was found to be positive but non-significant.

Key words: Jasmine flower, Production function, Resource productivity, Resource use efficiency, Optimum resource.

INTRODUCTION

Jasmine (Jasminum sambac) is popularly known as mogra. Jasmine captures in a most elegant and succinct way, the emotion which arises in the heart when the flower is inhaled. When the flower is held in the hand or when it is placed about the neck in the form of a garland, it links the individual with a devotional attitude. The floral decoration with jasmine holding primary importance is fashioned into curtains through the guests enter the marriage ground. The exquisite aroma of jasmine flowers is said to be a life long memory for the husband and wife who remain true to their vows. The word "attar" is used in India, it generally refers to the hydro-distillation of aromatic plant materials. In the city of Kannauj, the ancient art and craft of attar production is still practiced. Mogra attar produced from jasmine flowers is a costly and precious essence with characteristics quite distinct from the absolute.

Jasmine is economically important crop and is cultivated over an area of nearly 9000 hectares in India. It is mostly cultivated in Tamil Nadu, Karnataka, Uttar Pradesh and Maharashtra. Nanded district of Maharashtra has favourable climate for cultivation of fragrant species of jasmine which are mainly planted near

cities and towns where flower markets exit. But in most parts jasmine (mogra) is preferred because of its excellent lasing qualities after plucking. The peak season for harvesting of jasmine flower is March to July. In fact, one might argue that the farming community is the only one who really get the odour emitted by the living flower but it can never be fully captured in the absolute or essential oil. There are certain extremely volatile molecules that disappear once the flower is plucked. Farmer, his wife and children all joined together to work in the field, that would bring them added income to preserve their rural life styles. Thus, jasmine is cultivated on a commercial scale in Nanded district of Maharashtra. Since, no serious attempt has been made to identify the key input factors and their contribution in the jasmine (mogra) flower production. The present investigation, determine resource productivity, resource use efficiency and optimum resource allocation in jasmine flower production.

MATERIALS AND METHODS

Multistage sampling technique was used to select district, tehsil, villages and jasmine (mogra) gardens. In the first stage, Nanded district was purposely selected

^{*} Author for correspondence.