

Research
Paper

Evaluation of tree borne oilseeds for dryland areas of Karnataka

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ABSTRACT

A field experiment was conducted from 2005-06 to 2009-10 at Regional Agricultural Research Station, Bijapur, Karnataka, India to evaluate the promising oil yielding tree species for dryland areas of Karnataka. In present investigation six oil yielding tree species were tried. Looking to all the silvicultural parameters viz., tree height, clear bole height, diameter at breast height (DBH) and crown spread, *Pongamia pinnata*, *Simarouba glauca* and *Azadirachta indica* were found most promising to fast growing nature which are suitable for the dryland areas of the Karnataka for oilseed purpose.

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Key words : Annual increment, DBH, Dryland, Tree species

INTRODUCTION

India has the fifth largest vegetable oils economy in the world next only to USA, China, Brazil and Argentina. Oilseeds account for about 1.5 per cent GDP and 8 per cent of value of all agricultural products. Among different oilseed crop; groundnut, rapeseed-mustard and soybean account for about 80% of oilseeds area and 88% of oilseeds production in the country. They are cultivated in every state particularly in Madhya Pradesh, Rajasthan, Gujarat, Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu and Uttar Pradesh. Besides, a wide range of other oilseeds of forest and wild origin, including Simarouba, Neem, Jojoba, Karanja, Mahua, Wild apricot, Jatropha, Cheura, Kokum, Coconut, Oilpalm and Tung are growing in the country. The diverse agro-climatic conditions of the country are favourable for growing all the tree borne oilseeds. Tree borne oilseeds (TBO's) have considerable oil potential which needs to be fully tapped. There is limited scope to bring additional area under oilseeds as the demand for land will continue to rise due to urbanization and industrialization. Hence, the tree borne oilseeds may play an important role in self-sufficiency of vegetable oils production in near future.

Annual crops are the major contributors for almost

all sources of food and fodder. The declining per capita cultivable land poses limitation to meet the increasing demand for agricultural production in general and the improvement in standard of living and expansion of utilization of oil as industrial raw material calls for increased oilseed production in particular. The search for alternatives to all the usual sources of food, fodder and fuel wood has indicated that trees can play an important role in subsidizing the production of many of important commodities. Many oilseeds of tree origin have potential for utilization in varied commercial products and can supplement the consumption of annual oil to the extent of 2 million.

The country has vast potential of more than 50 lakh tones of tree borne oilseeds (TBO's). However, only 8-10 lakh tones is being collected resulting in 1.5 to 2.0 lakh tones of oil from tree origin resources. The oil extracted from some of these sources not only from an essential part of human diet but also serve as an important raw material for manufacturing soap, paints, varnishes, cosmetics, medicines, hair oil, lubricants, textile, auxiliaries and also potential substitute of diesel and kerosene. Oil cakes are used as cattle feed and organic manures (Anonymous, 2010). The growth and productivity of different tree borne oilseeds, various as per their natural