

Asian Journal of Plant Sciences

ISSN 1682-3974





A Farming Survey for Non-cultivation of Date Palm in District Karak

¹Muhammad Luqman, ¹Nawab Ali ²Ihsanullah and ³Ijaz Ahmad Khan ¹Department of Horticulture, ²Department of Agronomy, ³Department of Weed Science, NWFP Agricultural University, Peshawar, Pakistan

Abstract: A survey to investigate the reasons which are responsible for limitation of date palm cultivation in district Karak was conducted. Fifty farmers were contacted in this region. On the basis of the information obtained from the farmers, it is concluded that extension services fall short than the growing demands of the farmers. It should be immediately launched. The farmers should be exposed to necessary skills about propagation, pollination, transportation, storage and packing etc. They should be provided with good varieties and credits in order to promote the date palm cultivation in the region.

Key words: Date palm, survey for non-cultivation, recommendations

Introduction

Date palm (*Phoenix dactylifera*) local name "Khajjur" belongs to the family palmaceae or palmae. The cultivation of date palm requires high temperature, bright sunlight, low humidity, low rainfall and the absence of high winds. The date palm requires light, deep, well drained soil. Dates may be grown on slightly saline soil, a problem of arid regions which are home of the date palm.

Shakib et al. (1994) cultured shoot tip explants on MS medium supplemented with 0, 10, 50 or 100 mg 2,4-D/litre, plus 3 mg benzyl adenine and 3 g activated charcoal/litre, cultures were incubated under 116 h light at 1000 lux and 28 EC, with transfer to fresh media every 8 weeks. Callus production frequency was enhanced by increasing auxin concentration, being highest (55%) on medium with 100 mg 2,4-DD/litre. Somatic embryos were formed and plantlets were regenerated on medium without growth regulators. Plantlets were transferred to soil in the green house when they were 10-15 cm tall. Jaradat (1995) reported that wild and domesticated fruit and nut species of the Mediterranean region are endangered by modern agriculture, genetic erosion and environmental degradation. Most new plantations in this vast region are based on a narrow genetic base of rootstocks or seedlings imported from developed countries north of the Mediterranean. The domestication of important fruit tree species, including olive, grape, fig, pomegranate, date palm, almond, apricot and pistachio in the Mediterranean region and the distribution of their wild relatives is outlined. A programme to survey, collect, conserve and promote the region is described. Hashim (1997) conducted a survey for the decrease in 1994-95, the cause of the decrease was that many diseased date palms were investigated in the United Arab Emirates. Laboratory investigations found 7 fungal species and 2 nematode species associated with the diseased plants. Chatty et al. (1999) reported that the cultivated palm species belong to genera acclimatized to Mediterranean regions, with the exception of the two local species, Chamaerops humilis and Phoenix dactylifera (date palm). Among the 21 species recorded in a survey carried out in 1993, only 9 are cultivated to any extent. The remaining species exist exclusively in collections dedicated to preserving rare and threatened species. Germination is different in various palms species. The germination temperatures varied considerably according to the area of origin and the ecology of each species, with most optima falling between 15 and 35 EC.

The survey was conducted with the aim to propose strategy for promotion of date palm on the basis of farmers opinion.

Materials and Methods

In order to investigate the reasons of non-cultivation of date palm in district Karak, inpsite of suitable climatic and soil conditions, following tactics were followed. Fifty farmers belonging to different villages were randomly selected. They were contacted through questionnaire proforma. The questionnaire proforma contained questions like name, educational status, experience in farming, kinds of crops cultivated and the various reasons of non-

cultivation of date palm in their district.

Results and Discussion

The following results were evolved from the survey:

The major crops grown in summer are oat, millet and in winter gram, wheat, barley are their major crops. Maize is also grown in winter for fodder purpose.

About 80 percent farmers wanted to have flourishing date palm orchard but due to certain limitations they are unable to raise dates orchards.

According to these farmers following are the major reasons with their percentage of date palm limitation in this region.

- a Eighty percent farmers had no awareness about its benefit
- b Thirty percent farmers had no tradition of cultivating date palm. Once its cultivation starts, people will definitely go for its cultivation.
- c Poverty is an obstacle in their way of cultivating dates.

 Twenty five percent farmers cannot wait so long for first
- d Five percent farmers thought that strong gale and winds in summer may deteriorate dates during fruiting time.
- e In view of 40% farmers caring is a problem. If large number of people cultivate it, then they would be having no problem.
- f Thirteen percent farmers experience no water availability.
- g In view of 20% farmers new generation do not pay attention towards farming. Since date growing needs lot of services, which they cannot provide.
- b Ber or other trees are grown as an alternative for date palm because of its more importance i.e., shadow, timber, burning fuel, fodder etc. (10%)
- I Twelve percent farmers had opinion that dates growing deplete soil fertility.
- j Most of the people do not know the propagation, pollination, picking etc. of dates. It seems a herculean task to them as compared to wheat and gram.

The results may not exactly match the survey of other people (mentioned in the introduction) because of differences in area and purpose of survey. However, the results are more or less similar with the survey of McColl (1992), Murlidharan (1993), Jaradat (1995) and Chatty et al. (1999) etc.

On the bases of information obtained from the farmers, it is concluded that extension services are needed to launch date growing programmes in the region. A well planned research programme is required, so that new varieties, new methods of planting and harvesting should be found out. Creation of a good market, accessible to the farmers, which in turn can encourage the farmers to produce dates more quantitatively and qualitatively. Publicity of its benefit, nutritional value and therapeutic value on T.V. and by other media to mold people towards date growing should be encouraged. Resolve the water problem that farmers

faces, and to ensure better price for the produce in the area. Large number of research centers in this field should be setup and workshop on dates production should be regularly arranged from time to time to create awareness among the farmers of the region. Model date palm orchards should be established in the area to demolish the misconstrue of the people of the region. Adequate credit facilities to the farmers for dates growing should be provided. Such varieties should be introduced in the model orchards which can grow and bear fruit successfully in minimum possible time.

References

Chatty, Y., T. Tissaoui and R.M. Caballero, 1999. Effect of temperature on germination of ornamental palm trees in Tunisia. Proceedings of the Second International Symposium on Ornamental Palms and other Monocots from the Tropics, Tenerife, Spain, 3-6 February, 1997. Acta-Horticulturae. No. 486, 165-167.

- Hashim, A., 1997. Date palm diseases in the United Arab Emirates.
 Arab and Near East Plant Protection Newsletter, No.25, pp. 29.
 Jaradat, A.A., 1995. Modern agriculture endangers rich fruit and nut reservoir of the Mediterranean Basin. Diversity, 11: 127-128.
- McColl, C.R., 1992. Central Australian date industry: a strategy for development. Technical Bulletin Northern Territory, Department of Primary Industry and Fisheries, No.186, pp. 29.
- Murlidharan, C.M., 1993. Scale insects of date palm (*Phoenix dactylifera*) and their natural enemies in the date groves of Kachchh (Gujarat). Plant Protection Bulletin Faridabad, 45: 31-33.
- Shakib, A.M., S. Khoshkam and E. Majidi, 1994. Plant regeneration of date palm variety Estamaran by tissue culture. Seed and Plant, 9: 8-11.