

*Short communication*

## Flowering behaviour of mango in different directions

**B.T. RAVINDRA BABU, PANDURANGA, H.L. GURUPRASANNA and M.B. RAJEGOWDA**

University of Agricultural Sciences, GKVK, Bangalore-560 065

Solar radiation is one of the important components among the climatic parameters that play a major role in plant life right from germination to maturity. Mango occupies major dry land horticulture crop area among the fruit crops in eastern dry zone. Being the rainfed remunerative crop, area is extending every year. However, it is not devoid of problems of which early flowering, malformations, pest and disease are the major ones at the farmers level. Flowering time of mango depends upon the genotype and geographical co-ordinates viz., latitude, longitude, altitude and rainfall pattern of the season during the year. Further altitude of a place is one of the important features, which determines a definite role on the time of mango flowering. It has been observed that an increase in every 12m-altitude flowering is retarded by four days. Similarly for each degree latitude,

South or North of the tropics flowering is delayed by four days (Hopkins, 1958). Studies were initiated to know the influence of solar radiation on flowering behaviour in mango crop.

In well-established ten-year-old mango orchard (Var Mallika) randomly nine trees were selected for observation in various directions of tree canopy during 2002-03 at Dryland mango orchard UAS, (12°58' N lat and 77° 35'E at an altitude of 930 m.a.m.s.l, GKVK, Bangalore). With normal annual rainfall of 920 mm. The visual flowering percentage and behaviour of the individual tree with respect to the different directions of solar radiation interception i.e. N-E, N-W, S-E and S - W were recorded at weekly interval in each four quadrangles of tree canopy from flower initiation up to full blooming of tree canopy.

**Table 1 :** Visual observation of flowering (%) behaviour in each direction of mango in different interval of time

Date of Observation	Direction			
	N-E	N -W	S -E	S-W
26-12-02	17	13	27	22
03-01-03	28	21	41	37
08-01-03	51	44	56	53
14-01-03	84	61	86	68

The results revealed that visual flowering percentage was the highest in south-east direction compared to other directions (Table 1). This may be due to favourable degree of sunlight and optimum temperature condition in that direction. Further during the year, flowering initiation took place during last week of December and attained full bloom in later part of

January.

#### REFERENCE

- Hopkins.A.D., 1958. Bio-climatics-a science of life and climatic relations. United States Department of Agriculture. Publication No 280.