

Flowering and fruiting behavior of Jamun in relation to weather parameters

D K Sarolia, Vijay R Reddy S., D. Singh, Anita Meena
ICAR-Central Institute for Arid Horticulture, Bikaner (Raj.)

Jamun (*Syzygium cuminii* (L.) Skeels.) is one of the popular fruit crops native to Indian sub-continent. It is a minor fruit crops cultivated in small farm agroforestry or naturally scattered in various parts of the country. It is a versatile fruit trees in terms of food, agroforestry, industrial medicinal and therapeutic values. Fruits are highly nutritive, Low in glycemic index and are considered good for diabetic patients. The processed products viz. jamun vinegar, jamun honey, jamun-aonla swaras etc. are greatly popular and have considerable importance in local as well as international markets. Seed are relatively large in the arid regions which are rich in Jamboline that hinder sugar conversion and are considered good for diabetic patients. Jamun is hardy in nature and can be grown under marginal soil with pH value may range from 6.5-8.5. Although these crops are susceptible to frost and heat, but resistant to drought in comparison to other fruit crops and produces abundant crop of better quality fruits in areas having a distinct winter than tropical areas. At ICAR-CIAH, Bikaner an observational study was taken on three tagged trees of jamun cv. Goma Priyanka with the objective of quantifying and correlating the existing meteorological parameters with different phenophases and also assessing effect of climate aberrations on jamun in this area. Under irrigated hot arid conditions, jamun panicle emerge was initiated during February and ended by late April (total flowering span around 55-60 days) with the main flush time being March –April and the prevailing temperature (36.5/18.8 °C), relative humidity (57.9- 24.7 %) and evaporation rate (9.3 mm per day) during that phase. During fruit set, the temperature (38.9/23.5 °C) and RH (62/18 %) were recorded while during harvest, temperature (33.8/18°C) and relative humidity (90/56 %) were recorded. The heat units calculated over the base temperature 15.5°C was found to be 1881 degree days during the normal fruiting season.

Key words: Jamun, flowering, fruiting, arid regions, weather