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**Flower morphology and fruit maturity of four minor fruits (*Diospyros peregrina*, *D. discolor*, *Muntingia calabura* and *Careya arborea*) of Tropics and subtropics**

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**ABSTRACT**

*Floral biology and morphological features are essential for crop improvement and harvesting fruit at right time. Deshi (Diospyros peregrine Gurke) and bilatigab (Diospyros discolor Gurke), china cherry (Muntingia calabura L.) and kumbhi (Careya arborea Roxb.) are minor edible fruits of tropics and subtropics. A study was conducted at the Botanical Garden of Bangladesh Agricultural University, Mymensingh to investigate floral morphology and maturity indices of the four fruit species during 2008 to 2011. The flowers are incomplete, regular, polysepalous and poly petalous with numerous stamens and superior ovary in deshi gab; and multicarpellary ovary in bilati gab. The flowers are hermaphrodite, complete, polysepalous, polypetalous, numerous stamen with superior ovary in china cherry and inferior ovary in kumbhi. Fruit growth study revealed that maximum dry mass accumulation in seed i.e. physiological maturity (PM) was obtained when the fruit weight (dry) also reached highest in all species. Visual indices of PM were also recorded by changes in pericarp colour. These indicated the appropriate fruit harvesting stage. Results showed that fruits may be harvested at physiological maturity by observing fruit size and visual colour change of the pericarp.*

***Keywords:*** Minor fruits, floral biology, physiological and harvest maturity*,* ‘gab’, china cherry, ‘kumbhi’.