

# EFFECT OF LARVAL FOOD PLANTS AND SEASONS ON THE QUALITY OF THE AFRICAN WILD SILKMOTH, *GONOMETA POSTICA* WALKER (LEPIDOPTERA: LASIOCAMPIDAE) COCOONS

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Wild silkmoth farming offers an economic incentive for forest-adjacent communities to fully participate in forest conservation initiatives. *Gonometa postica* Walker is known to produce high-quality silk. It is being utilised for commercial wild silk production by the forest-adjacent communities in Mwingi District in Kenya. The developmental time of *G. postica* larvae and cocoons quality were studied in the Imba and Mumoni woodlands of Mwingi during the long and short rainy seasons of 2006 and 2007. *Acacia elatior* Brenan, *Acacia tortilis* (Forssk.) and *Acacia nilotica* (L.) Del were used as larval host plants. Larvae were reared in semi-captivity by using net sleeves attached to the branches of the host plants. Also, cocoons from the wild population were sampled from the host plants to evaluate their quality. The weight and size of cocoons were used as the determinant of their quality. Larval developmental period and cocoons quality differed according to host plants, seasons and sites, for those reared in semi-captivity. However, cocoons quality from the wild habitat varied with seasons and sites but not with host plants. Larvae reared on *A. elatior* had the shortest developmental period and highest cocoons quality than those raised on *A. tortilis* and *A. nilotica*. Thus, *A. elatior* is recommended as the most suitable host plant for the semi-captive rearing of *G. postica* larvae. This will help augment the natural population of the silkmoth and to ensure the sustainable harvesting of the cocoons.