

EFFECT OF PHYTO-ECDYSTEROID HORMONE ON THE RIPENING AND SPINNING IN SILKWORM, *BOMBYX MORI* (L) UNDER SEMI-ARID CONDITIONS OF ANDHRA PRADESH

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ABSTRACT – Phyto-ecdysteroid hormone from the Central Sericultural Research and Training Institute, Mysore was tested at the Regional Sericultural Research Station, Anantapur and with the selected farmers at field level. Four farm and four field trials were conducted to study the effect of phyto-ecdysteroid on the uniform maturation in 5th instar silkworm larvae at the onset of spinning and larval response to phytoecdysteroid and its effects on cocoon characters. Known quantity of fresh leaf was sprayed with known concentration of phyto-ecdysteroid and fed to the silkworms at the onset of spinning. Maturation/ ripening (80%) was advanced by 8-12 h at laboratory and 20-25 h at field conditions compared to untreated larvae (control). Picking of ripening worms thus become easy due to uniform and advanced maturation resulting in reducing the cost on labour and time. The effect of phyto-ecdysteroid on cocoon characters was negligible. The results are discussed in terms of synchronization of larval ripening, cocoon characters and economic benefits at commercial silkworm rearing.

Key words : Phyto-ecdysteroid hormone, silkworm, semi arid.