

Agriculture Update_____ Volume 12 | TECHSEAR-1 | 2017 | 210-217

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RESEARCH ARTICLE: Strengthening of sericulture industry through fortification of mulberry leaves to enhance commercial cocoon characteristics of silkworm

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ARTICLE CHRONICLE: Received : 11.07.2017;

Accepted : 26.07.2017

SUMMARY : Studies on strengthening of Sericulture though fortification of mulberry leaves with aqueous extracts of medicinal plants on larval growth, development and commercial cocoon traits of silkworm, *Bombyx mori* L. were conducted during 2013-2014. The silkworm (PMxCSR₂) reared on mulberry leaves fortified with aqueous extracts of *Aloe vera* and *Tinospora cordifolia* at eight different concentrations, *Aloe vera* at 100 % concentration had effective enhancement of larval weight (3.37g), ERR (96.33%), cocoon weight (2.01g), shell weight (0.375g), pupal weight (1.64g), shell ratio (18.66%), silk productivity (4.83cg day⁻¹), filament length (883.95m) and denier (2.41) besides reduced larval duration (7.76 days) and disease incidence (3.67%) when compared to other treatments and control. The plant extracts in higher concentration yielded beneficial effects rather in lesser concentration. This study helps to improve the quality of silkworm nutrition so as to get sustainable cocoon production

How to cite this article : Mala, N., Sadatilla, Fatima and Babu, S. Harish (2017). Strengthening of sericulture industry through fortification of mulberry leaves to enhance commercial cocoon characteristics of silkworm. *Agric. Update*, **12**(TECHSEAR-1): **210-217**; **DOI: 10.15740/HAS/AU/12.TECHSEAR(1)2017/210-217**.

KEY WORDS: Sericulture, Fortification, Mulberry leaves, Silkworm, Cocoon

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