

## RESEARCH HIGHLIGHTS

# Pest Infestation: Potential Threat to Sericulture Efficacy

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Sericulture is an agro-based rural industry that rear silkworms for the production of natural fiber and silk. A monophagous insect called *Bombyx mori* is a domesticated species that is also known as the caterpillar of the domestic silk moth is most widely used for silk production.

The prosperity of this industry is directly linked with the production of good quality mulberry leaves which is a source of nutrition to the silkworms. Mulberry, scientifically known as *Morus Alba* L. plays a key part in cocoon production but unfortunately many biotic and abiotic factors affect the production of mulberry leaf and also deteriorate its quality. Pests are the potential threat to mulberry plants that not only reduce its yield by 20 % but also affect the quality and normal functions of mulberry leaves<sup>1</sup>.

Mahadeva<sup>2</sup> investigated the nutritive status of the mulberry leaves under six main pests attack. Furthermore, the appropriateness of these leaves for silkworms was also examined in this experiment. The results of this study showed that consumption of infested leaves badly affects the commercial characteristics of cocoon<sup>3,4</sup>.

Considering these facts, an overview was conducted regarding modifications in biochemical constituents, nutritional as well as photosynthetic pigments in mulberry leaves because of pest infestation. Additionally, the effect of consuming these poorer quality leaves on the silkworm larvae was also evaluated in this review<sup>5</sup>.

This study exhibited that the pest infestation on mulberry plants not only lessens the quantity but also worsens the quality of leaves by causing physiological disorders. As a result of which, they become malformed, deformed, chlorotic as well as nutritionally inferior and consequently decline the nutritive value of these leaves hinders the growth and development of silkworms, which affect their commercial status<sup>5</sup>. Hence, all these factors lead to the financial losses of the peasants at multiple levels by restraining the potential mulberry leaf production.

Conclusively, pests have become an alarming threat to mulberry plants and cause huge economic losses, the need of the hour is to create awareness programs for farmers to protect mulberry foliage from the pest attack by following proper eco-friendly Integrated Pest Management (IPM) practices.

## REFERENCES

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