



Indian Farmer
Volume 9, Issue 10, 2022, Pp. 476-482.
Available online at: www.indianfarmer.net
ISSN: 2394-1227 (Online)

ORIGINAL PAPER



Panchgavya Botanical Preparation and its useful effects in controlling insects and plant diseases in Horticultural Crops

Savan Sharma

School of Agriculture, Lovely Professional University, Department of Horticulture

**Corresponding Author: savansharmatl@gmail.com*

Article Received: 24 October 2022

Published Date: 28 October 2022

INTRODUCTION

Panchagavya as an organic growth-promoter for small and marginally profitable vegetables farmers making the transition to organic vegetable cultivation, to use natural products like panchagavya to produce chemical residue free food crops and hence panchagavya is the home for the cultivation of numerous vegetables, use of panchagavya in agriculture and horticulture for improving soil and plants health and protective measure against plant diseases. Panchagavya is a major source of nutrient substitute used by 73 percent of the farmers. They use around for the pest management in brinjal and organic vegetable cultivation, necessary to use natural products like Panchagavya to produce chemical residue free food crops (Patil et al., 2010). Panchagavya can play a major role in organic farming, panchagavya and kunapajala to enhance the biological of fruits and vegetables. The liquid organic manures Panchagavya , Panchagavya is an organic product produced by using the use of five specific through-products of cow like cow dung, cow urine, cow milk, cow ghee, cow curd and other substances. It has the capability to play the function of promoting boom and supplying immunity in plant machine thereby confers resistance against pest and sicknesses. Panchagavya includes several vitamins i.e. macronutrients like N, P, okay and micronutrients which might be required for the growth and development of vegetation and additionally consists of various amino acids, vitamins, increase regulators like Auxins, Gibberellins and also useful microorganisms like pseudomonas, azatobacter and phosphor bacteria etc. Overall growth and physiology of vegetables and fruit crops can be increased by application of botanical pesticide such as Panchgavya which can provide protection and immunity of many fruit and vegetable crops; it is very effective in minimizing the loss by insect loss (Jagathy, and Lavanya. 2021).

Material Required in Preparation of punchgavya botanical

- 250 g custard apple leaf, 125 g dry chili ,neem leaf 125 g
- 1st day – Cow dung 2.4 kg, and cow ghee 0.33kg and store the mixture for 15 days at room temperature around 25- 30°C
- 2ND day add water and cow urine as 3.3litres and again store it at pervious storage for 15 days
- After 15 days add cow curd 0.66 liters, tender coconut water, Jaggary 1 kg + well ripe banana 4 pieces
- Before application to main field add reaming constituents of Panchgavya in it such as dry chilies, dry leaves mixture
- It can be applied on plants at nursery and adult stage of growth

STEPS IN MAKING PANCHGAVYA



1. (125 g dry chili)



2. (250 g) custard apple leaf



3. (After weighting gridding of both things is must)



4. (Proper mixing of materials in such as dry chilies and custard apple leaves are very important)



5. (Collection of grinded material in container)



6. Panchgavya collected after 15 days should be look like this and later must be added with remaining ingredients of panchgavya botanical after 15 days of storage at room temperature.



7. (Mixing of Prepared panchagavya material after 15 days with other remaining parts of pachngavya in one container)



8. Ratio of different parts of panchgavya should be added in proper ratio



9. On mixing all things together we can spray it on plants at nursery stage as well adult stage

CONCLUSION

Biological methods of pest control and improving plant immunity and its potential to kill insects, and controlling losses occurred in yield due to pest or insect attack and Panchgavya botanical can be made on farms by farmers itself to minimizing yield losses in horticultural crops due to insects and pests.

REFERNCE

Jagathy, K., & Lavanya, K. (2021). Comparative study on Synergistic effect of plant growth promoting microalgae and Panchagavya in reclaiming the wasteland and growth induction of *Vigna radiata*. *Indian Journal of Science and Technology*, 14(30), 2504-2510.

Gowthamchand, N. J., & Soumya, T. M. (2020). Effect of Bulky Manures and Fermented Liquid Organics on Growth, Yield, Nutrient Uptake and Economics of French Bean (*Phaseolus vulgaris* L) Under Rainfed Condition. *International Journal of Agriculture, Environment and Biotechnology*, 13(1), 51-58.

Patil, M., Bheemappa, A., Angadi, J. G., & Arvindkumar, B. N. (2010). Production and post-harvest management practices followed in organic vegetable cultivation. *Karnataka Journal of Agricultural Sciences*, 23(2).

Kumar, S., Hariprabha, S., Kamalakannan, S., Sudhagar, R., & Sanjeevkumar, K. (2020). Effect of panchagavya on germination and seedling growth of balsam (*Impatiens balsamina*). *Plant Archives*, 20(1), 3735-3737.