



Panchagavya: An Ancient Indian Gift to Modern World of Organic Farming

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Panchagavya is an organic product having the potential to play the role of promoting growth and providing immunity in plant system. Traditional farming in India has always had the cow at its centre and Panchagavya has been an essential part of such ancient farming practices. (Pancha means five; Gavya means the cow). Panchagavya consists of 5 main ingredients that include milk, curd, ghee (clarified butter), cow dung and cow urine from Desi cows. Daily Dump Panchagavya is further formulated with tender coconut, banana, jaggery and water. The most important benefit of Panchagavya is that it helps to build and nourish living soil. Only soil that is living is healthy. Soil microorganisms play a critical role in increasing soil fertility - they break down organic matter into a form that plants can absorb, they increase aeration, strengthen soil structure, and are an important sink for mineral nutrients.

Composition of panchagavya

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|-------------------------|-------------------------|----------------------------|
| a. Cow's dung | b. Cow's urine | c. Cow's milk |
| d. Curd from cow's milk | e. Ghee from cow's milk | f. Sugarcane juice/Jaggery |
| g. Tender coconut water | h. Banana (poovan) | |

Materials required (for 100 liters of stock solution) for panchagavya

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|-----------------------------------|-----------------------|----------------------------------------|
| 1. Cow dung: 7 kg | 2. Cow ghee: 1 kg | 3. Cow urine: 3 liters |
| 4. Water: 10 liters | 5. Cow milk: 3 liters | 6. Cow curd: 2 liters |
| 7. Tender coconut water: 3 liters | 8. Jaggery: 3 kg | 9. Well ripened poovan banana: 1 dozen |

Other materials required for panchagavya

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|-----------------------------------------------------------|----------------------------|-----------------------------|
| 1. Wide mouthed mud pot/ plastic can (30 liters capacity) | 2. Wire mesh/ mosquito net | 3. Full hand plastic gloves |
| 4. Face mask | 5. Sprayer (if needed) | |

Procedure for preparation of panchagavya

1. Take 3.5 kilogram of fresh cow dung for Indian breeds only and add 500 grams of cow's ghee. Mix the above ingredients thoroughly both in morning and evening hours and keep it for 3 days.
2. Then take 5 liters of cow urine and 5 liters of water, and both add in earlier mixture and keep it for 15 days.
3. Regular mixing is needed during this period in the morning and evening hours.
4. After 15 days mix the following and Panchagavya will be ready after 30 days.

- a. Cow milk: 1.5 liters
d. Jaggery: 1.5 kilograms
- b. Cow curd: 1 kilogram
e. Well ripened poovan banana: 6 numbers
- c. Tender coconut water: 1.5 liters

Precautions during preparation of panchagavya

1. Container should be kept open under shade. 2. Content is to be stirred twice a day both in morning and evening. 3. The Panchagavya stock solution will be ready after 48 days. 4. Should be kept in shade and covered with wire mesh or plastic mosquito net to prevent houseflies from laying eggs.

Application doses of panchagavya

1. Apply 3 % solution/ 50 liters per hectare with irrigation water. 2. In pulse crops it can be used at pre-flowering, at flowering and pod setting, and at fruit or pod maturation

How to use panchagavya

Panchagavya should be used only after diluting with water. A 3% solution is usually advised which means about 3 litres of Panchagavya for every 100 litres of untreated water. Use as seed treatment: Soak seeds in this solution for 15-20 minutes and then sow them. Basically, it is used as seed treatment, soil application as liquid manure and pest controlling agent (repellent).

Benefits of panchagavya

1.Improve plant growth and development. 2.Acts as a growth promoting element 3.Improves plant nutrient uptake capability 4.Increase in plant immune system against various plant insect pest and diseases.

Conclusion

Present day farming has become the chemically oriented unhealthy and degrading all the natural resources. The excess application of carcinogenic harmful chemicals not only destroying agriculture eco-system, but also created the unhealthy environment including food system, the air we are breathing. To overcome from such problems, the Panchagavya is the ultimate source to be used in agriculture to maintain nutrient balance of soil, protecting soil life, aquatic life and absolutely our planet earth along with without compromising yield quality and quantity through managing plant related issues like nutrients, plant insect pest and diseases. This the fine gift of Indians to the world to protect this mother nature. This can be used in organic farming as it is completely organic based, and has zero negative impacts on plants and environment.

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