



Panchagavya Preparation and Its Application

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Panchagavya, an organic product has the potential to play the role of promoting growth and providing immunity in plant system. Panchagavya consists of nine products viz. cow dung, cow urine, milk, curd, jaggery, ghee, banana, Tender coconut and water. When suitably mixed and used, these have miraculous effects.

- Cow dung - 7 kg
- Cow ghee - 1 kg

Mix the above two ingredients thoroughly both in morning and evening hours and keep it for 3 days

- Cow Urine - 10 liters
- Water - 10 liters

After 3 days mix cow urine and water and keep it for 15 days with regular mixing both in morning and evening hours. After 15 days mix the following and panchagavya will be ready after 30 days.

- Cow milk - 3 liters
- Cow curd - 2 liters
- Tender coconut water - 3 liters
- Jaggery - 3 kg
- Well ripened poovan banana – 12 nos.

Preparation

All the above items can be added to a wide mouthed mud pot, concrete tank or plastic can as per the above order. The container should be kept open under shade. The content is to be stirred twice a day both in morning and evening. The Panchagavya stock solution will be ready after 30 days. (Care should be taken not to mix buffalo products. The products of local breeds of cow is said to have potency than exotic breeds). It should be kept in the shade and covered with a wire mesh or plastic mosquito net to prevent houseflies from laying eggs and the formation of maggots in the solution. If sugarcane juice is not available add 500 g of jaggery dissolved in 3 liter of water.

Ingredients of Panchagavya



Cow dung



Cow urine



Cow ghee



Milk



Water



Cow curd



Jaggery



Tender Coconut



Well ripened



poovan banana

Recommended dosage

Spray system

3% solution was found to be most effective compared to the higher and lower concentrations investigated. Three litres of Panchagavya to every 100 litres of water is ideal for all crops. The power sprayers of 10 litres capacity may need 300 ml/tank. When sprayed with power sprayer, sediments are to be filtered and when sprayed with hand operated sprayers, the nozzle with higher pore size has to be used.

Flow system

The solution of Panchagavya can be mixed with irrigation water at 50 litres per hectare either through drip irrigation or flow irrigation

Seed/seedling treatment

3% solution of Panchagavya can be used to soak the seeds or dip the seedlings before planting. Soaking for 20 minutes is sufficient. Rhizomes of Turmeric, Ginger and sets of Sugarcane can be soaked for 30 minutes before planting.

Seed storage

3% of Panchagavya solution can be used to dip the seeds before drying and storing them.

Periodicity

Pre flowering phase : Once in 15 days, two sprays depending upon duration of crops

Flowering and pod setting: Once in 10 days, two sprays
stage

Fruit/Pod maturation stage : Once during pod maturation

Time of application of Panchagavya for different crops is given as follows

| Crops | Time schedule |
|--------------|---|
| Rice | 10,15,30 and 50th days after transpalnting |
| Sunflower | 30,45 and 60 days after sowing |
| Black gram | Rainfed: 1st flowering and 15 deays after flowering Irrigated: 15, 25 and 40 days after sowing |
| Green gram | 15, 25, 30, 40 and 50 days after sowing |
| Castor | 30 and 45 days after sowing |
| Groundnut | 25 and 30th days after sowing |
| Bhendi | 30, 45, 60 and 75 days after sowing |
| Moringa | Before flowering and during pod formation |
| Tomato | Nursery and 40 days after transplanting: seed treatment with 1 % for 12 hrs |
| Onion | 0, 45 and 60 days after transplanting |
| Rose | At the time of pruning and budding |
| Jasmine | Bud initiation and setting |
| Vanilla | Dipping setts before planting |

Effect of Panchagavya

Leaf

Plants sprayed with Panchagavya invariably produce bigger leaves and develop denser canopy. The photosynthetic system is activated for enhanced biological efficiency, enabling synthesis of maximum metabolites and photosynthates.



Stem

The trunk produces side shoots, which are sturdy and capable of carrying maximum fruits to maturity. Branching is comparatively high.

Roots

The rooting is profuse and dense. Further they remain fresh for a long time. The roots spread and grow into deeper layers were also observed. All such roots help maximum intake of nutrients and water.

Yield

There will be yield depression under normal circumstances, when the land is converted to organic farming from inorganic systems of culture. The key feature of Panchagavya is its efficacy to restore the yield level of all crops when the land is converted from inorganic cultural system to organic culture from the very first year. The harvest is advanced by 15 days in all the crops. It not only enhances the shelf life of vegetables, fruits and grains, but also improves the taste. By reducing or replacing costly chemical inputs, Panchagavya ensures higher profit and liberates the organic farmers from loan.

Drought Hardiness

A thin oily film is formed on the leaves and stems, thus reducing the evaporation of water. The deep and extensive roots developed by the plants allow to withstand long dry periods. Both the above factors contribute to reduce the irrigation water requirement by 30% and to ensure drought hardiness.

Panchagavya for animal health

Panchagavya is a living elixir of many micro organisms, bacteria, fungi, proteins, carbohydrates, fats, amino acids, vitamins, enzymes, known and unknown growth promoting factors micronutrients trace elements antioxidant and immunity enhancing factors.

When taken orally by animals and human beings, the living micro organisms in the Panchagavya stimulate the immune system and produce lot of antibodies against the ingested microorganisms. It acts like vaccine. This response of the body increases the immunity of animals and humans and thus helps to prevent illness and cures disease. It slows down the aging process and restores youthfulness. The other factors present in Panchagavya improve appetite, digestion and assimilation and elimination of toxins in the body. Constipation is totally cured. Thus the animals and humans become hale and healthy with shining hair and skin. The weight gains are impressive.

Pigs

Panchagavya was mixed with drinking water or feed at the rate of 10 ml – 50 ml/pig depending upon the age and weight. The pigs became healthy and disease free. They gained weight at a faster rate. The feed to weight conversion ratio increased tremendously. This helped the piggery owners to reduce the feed cost and to get very good returns due to increased weight.

Goats and Sheep

The goats and sheep became healthy and gained more weight in a short period after having administered 10 ml to 20 ml Panchagavya per animal per day depending upon the age.

Cows

By mixing Panchagavya with animal feed and water at the rate of 100 ml per cow per day, cows become healthier with increased milk yield, fat content and SNF. The rate of conception increased. The retained placenta, mastitis and foot and mouth disease became things of the past. Now the skin of the cow is shiny with more hair and looks more beautiful. Instead of spraying urea on paddy straw (hay) before staking, a few farmers sprayed the 3 percent solution of Panchagavya, layer after layer during the staking and allowed it to ferment. The cows preferred such hay compared to unsprayed hay stock.



Poultry

When mixed with the feed or drinking water at the rate of 1 ml per bird per day, the birds became disease-free and healthy. They laid bigger eggs for longer periods. In broiler chickens the weight gain was impressive and the feed-to-weight conversion ratio improved.

