

Sanjeevani- A Perfect Match for Soil Health and Sustainability

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Introduction

Indigenous technical knowledge (ITK)has immense innovation potential. india is a country which has its own set of unique traditional knowledge and technology bases. The population of India is growing rapidly and demand for food is also increasing. These technical knowledge and technologies can play a significant role in the overall socio-economic development of the communities. Sanjeevani a traditional preparation, is renowned for its potential benefits in enhancing crop growth. It is created using indigenous ingredients and methods, reflecting the rich knowledge of natural resources.

As with any agricultural practice, it's advisable to conduct thorough research, seek guidance from experts and consider local conditions before adopting sanjeevani as part of crop management. Respecting the traditional knowledge embedded in sanjeevani while being open to collaboration with modern agricultural science can pave the way for sustainable and holistic approaches to farming. Neem leaves are known to have various benefits in agriculture. They contain natural compounds that act as insecticides and fungicides, which help to control pests and diseases in crops. whereas Cow urine is a natural fertilizer that helps in plant growth and soil fertility. Cow urine is rich in nutrients like nitrogen, phosphorus, and potassium. which is useful for healthy plant growth.

Materials and Method of Preparation of Sanjeevani

Sanjeevani is a low-cost organic formulation, For 2.5 liters of sanjeevani the neem leaf extract of 250ml, cow urine of 2.5 litres into an earthen pot. Primary ingredients are neem leaves and cow urine, because neem leaves have pesticidal and growth-promoting properties, while cow urine is valued in traditional agricultural practices for its nutrient content.

Sufficient amount of fresh neem leaves are takrn into the mixer and to be grind.,now the



neem extract juice of 250ml is to be taken into a bowl and the cow urine of 2.5liters are poured into the earthen pot and neem juice extract of 250ml is to be added into the earthen pot. The total quantity of sanjeevani is 2.75 litres, The ingredients in the earthen pot are mixed thoroughly, Then the prepared solution is to be kept a side for one day, after one day the solution is to be extracted into the bottle, 50ml of solution is to be diluted in one liter of water and applied to the field operations.









Fig:1.1 Neem leaves

Fig:1.2 Cow urine

Fig:1.3Day1 of sanjeevani

Fig:1.4 Extracted sanjeevani

Things to Know About Sanjeevani

Application of sanjeevani can be done using the spraying method. When applying sanjeevani to crops, dilution of solution is essential to ensure the right concentration for better results. Dilute the 50ml of sanjeevani solution for one litre of water, and mix the diluted solution well for the uniform distribution of ingredients. Spraying the diluted solution on crops can control pests, improve plant health, improve soil fertility and increase crop yields. For preparing sanjeevani it costs around Rs.20/-

- Sanjeevani helps in protecting plants, it also boosts the immune system of all crops, and develops immune resistance, disease and pest resistance. It prevents and controls diseases like late blight, early blight, powdery mildew, mosaic virus leaf curl virus, etc...
- It is non-toxic, chemical-free, safe and eco-friendly. It is more effective and economical than chemical sprayers.
- Crops that benefit from sanjeevani are tomato, potato, brinjal, chilli, ladies finger, all flowers, wheat, paddy, pulses, oil seeds, etc...
- For spraying sanjeevani the recommended dosage is usually around 1-2 litres per acre.
 Different crops require different dosages based on crop requirements. For example, for



crops like tomatoes, and chilli the recommended dosage of sanjeevani for spraying is 1-1.5 litres per acre.

• For 1.5 litres of sanjeevani 30 litres of water is used to dilute the solution for spraying to 1 acre of land.

Conclusion

Sanjeevani is an eco-friendly act like a vaccine for young plants and serves as a natural antibiotic on diseased plants, It has shown effective results in controlling pests and promoting plant growth, It is environmentally friendly, easily available for the farmers to prepare and it is cheaper at cost. Sanjeevani helps to identify many viruses and fungi.

Reference

- Barbier, E. (1987): The concept of sustainable economic development. *Environmental conservation*, 101-110
- Dewalt, B.R. (1994). Using indigenous knowledge to improve agriculture and natural resource management. *Human organisation* 53(2).123-131.
- Warren, D.M. (19910. Using IK for agricultural development. World Bank Discussion Papers 127. Washington DC: World Bank.