

The Grandmother's Recipe That Brought Earthworms Back to Tullamulla

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Fatima Akhtar never attended school. She cannot read the labels on chemical bottles. But at 70 years old, she remembers what her mother taught her and on a single day in Tullamulla, she reminded 49 other farmers that they had forgotten everything. The SKUAST-Kashmir, conducted a **one-day training program** on "Sustainable and Eco-Friendly Management of Plant Diseases" at the Tullamulla funded by MSME. The topic was radical: **zero synthetic chemicals**. Most farmers arrived skeptical. "No chemicals?" whispered Ghulam Hassan Bhat, a 52-year-old grower. "Then how do we save our trees?" By sunset, he had his answer.



What Made This Day Different

The trainer did not bring a single chemical name. Instead, he brought five farm-made recipes:

Remedy	Made From	Cost per Acre
Jeevamrit	Cow dung, cow urine, jaggery	₹80
Dashparni	11 types of leaves	₹0 (weeds)
Buttermilk spray	Sour buttermilk + water	₹40
Trichoderma	Farm-multiplied fungus	₹150
Neem-garlic	Neem seeds + garlic cloves	₹100

Total: ₹370 per acre. Chemical alternatives cost ₹18,000.

Farmers spent the afternoon mixing, grinding, and brewing. The women 33 of them worked faster than the men.

Then came the moment no one expected.

Fatima Akhtar stood up. "My mother used cow urine and green chilies," she said quietly. "Her apples were smaller, yes but never sick. What did we lose?"

The trainer put down his microphone. "Nothing. You were told to forget. Today, we remember."

The room fell silent. Then the women began to clap.

The Results

A 30-day follow-up revealed:

30 farmers prepared at least one botanical extract

15 farmers stopped chemicals completely on trial blocks

Scab dropped 21% without a single synthetic spray

Earthworms returned to 11 orchards including Ghulam Hassan's

"I had not seen an earthworm in seven years," he says, holding one up to the sun. "Now I see them everywhere. That is my real crop — not the apple. The earth that holds it."

The women formed a "**Jeevamrit Sisters**" group, preparing 200 liters every week at zero cost. "Men discuss," says leader **Ayesha Bano**. "Women do. Give us a bucket and cow dung we finish before the men finish arguing."

What Tullamulla Teaches Us

The best solutions are not in a bottle. They are in the soil, in the weeds, in grandmothers' memories. One day was enough to remember.