

Leaflets available at bioRe®:

1. Beejamrat (seed treatment)
2. CPP + cow urine (seed treatment)
3. Neem seed extract
4. GOC
5. Top Ten
6. Neem oil and Hing
7. Cow urine
8. Buttermilk
9. Early stage protection of cotton
10. Jeevamrat
11. How to spray

The leaflets are available in English and Hindi

उपरोक्त पत्रक हिन्दी और इंग्लिश में उपलब्ध है

The informations contained in these leaflets are based on the knowledge and experience of bioRe® staff and its associated farmers. Some of the recipes were adopted from farmer(s organisations) of other states or are based on bio-dynamic recipes (i.e. CPP) transferred by Peter Procter.



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Recommendation
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HOW TO SPRAY

Guideline for an effective application of self-made organic pest control products



HOW SELF-MADE ORGANIC PEST CONTROL PRODUCTS WORK

Self-made organic pest control products like cow urine, neem, hing, GOC and Top ten are not pesticides in the narrower sense of the word because they much more **repel the insects** than actually kill them. They will **make the plant unattractive** to the insects through a pungent odor and taste (hing, Top Ten, GOC), hormones and hormone-like substances (cow urine, neem), bitterness (Top Ten) or they cause tingling and burning (GOC).

Keep in mind, that the tingling and burning of GOC will affect all soft bodied insects living on the plant, harmful species as well as beneficial ones. Creating an environment which is favorable for the **development of beneficial species** (insects, birds,...) and **strong, resilient plants** should always be the farmer's first priority.

THE RIGHT QUANTITY

* Seedling stage:	1 lit for 80 m ²	→	3 pumps/acre
* Early stage:	1 lit for 66 m ²	→	4 pumps/acre
* Squaring:	1 lit for 33 m ²	→	8 pumps/acre
* Blooming - Harvest:	1 lit for 20 m ²	→	13 pumps/acre

THE RIGHT APPLICATION

- * Always **clean your pump** before use to remove residues of other pesticides. Empty the pump completely after use and rinse with water.
- * Use **fresh products**, they are the most effective.
- * The general rule is: **the more of the leaf area is wettened, the more effective** can the product unfold its properties. Therefore apply the spray to the whole leaf area, from top to bottom and all four sides.
- * Try to apply the **spray to the underside of the leaves** as well, as this is where the insects are located.
- * **Protect yourself!** Wear long sleeved shirts and trousers when spraying. Also protect your mouth, nose and eyes, especially when working with GOC and neem.

THE RIGHT TIME

- * Insects are most active in the **morning and evening time**. To „catch“ most of them, you should spray during these hours.
- * Some products can also react with the sunlight and cause leaf burn to the plant. Therefore do **never spray during midday** on clear, sunny days.
- * During monsoon season it can be difficult to find a good moment to spray. The product should be given at least **2 hours to dry on the leaves** and effect its action before the next rainfall.
- * If you observe that the population of one or more harmful insect species is growing, act immediately. Observe especially the eggs and young, tiny life stages of the insects and **act before the insects become adults and multiply**.