

Gardening Products to Use/Avoid

	YES	NO
1. Weed/Grass Killer	White Vinegar Burn-Out (Clove oil, Citric Acid) Preen <u>ORGANIC</u> (corn gluten) Bonide Weed Preventer (corn gluten) Boiling water	Roundup (glyphosate) Weed-B-Gone ("") Preen Bonide KleenUp (glyphosate) Atrazine
2. Insecticide	Neem-based products Bonide Bt (for caterpillars) Any <i>Bacillus thuringiensis</i> (Bt) Horticulture oil, if dormant or when bees are inactive	Sevin Bonide Systemic (neonics) Malathion Permethrin* Spinosad Rotenone Chlorpyrifos Sabadilla
3. Roses	Espoma: Rose-tone Bonide Rose Rx (Neem)	Bayer Rose Care (neonics)
4. Slugs	Sluggo	
5. Slow-release Plant Food	Espoma Bloom All organic fertilizers are slow-release	Osmocote (polymer-coated) Multi-cote (polymer-coated) Jack's
6. Fertilizers	Neptunes Harvest Espoma: Holly-tone, Plant-tone, etc Compost	Scott's and any other chemical synthetic fertilizer
7. Potting Mix	Coast of Maine North Country Organics MiracleGro <u>Organic</u> Potting Mix	Miracle Grow Potting Mix, or other non-organic mix
8. Soil Moisture	Compost	Soil Moist granules
9. Grubs	Beneficial nematodes Putting compost down in June	GrubEx or other chemical products

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| 10. Lawn products | Do soil test to see what is needed.
Leave grass clippings for nitrogen.
Add lime if pH is low.
Ospoma 1/2/3/4 Organics | Scotts 1,2,3,4 or any
chemical product not labelled
as organic |
| 11. Ants | Boric Acid: small amount on top of ant hill
Diatomaceous Earth, apply carefully in
inaccessible areas to pets and children,
not on windy days. Do not inhale. | Products that kill advertise
killing 100-500 insects |

12. Mosquitos and ticks

Yard spraying for mosquitos and ticks: Many services use pyrethrum, derived from **NO!** chrysanthemums and advertise these sprays as “natural.” Pyrethrums from mums and synthetic pyrethroids are highly toxic to fish and other aquatics (tadpoles, for example) as well as bees and other beneficial insects. **These are NOT organic compounds.** They should not be sprayed broadly across an entire property. Cedar-oil based products are less toxic but also are not organic. The best way to prevent ticks on a property is to:

- **Keep a Tidy Yard.** At home, keep your lawn mowed and your yard clear of leaves and other brushy debris.
- If your property abuts a wooded area, add a wide wood chip or gravel border around the edge of your yard to prevent tick migration.
- **Watch Where You Walk** Stick to wider trails and avoid overgrown pathways in wooded or bushy areas where the ground is covered in high grass or leaf litter.
- **Raise some chickens and let them free range your yard to eat the ticks.**
- **Keep the woodpile stacked neatly in as sunny an area as possible...ticks do not like dry and light.**
- **Try to keep deer away from your yard as they carry ticks.**

Repellents for ticks and mosquitos

Ticks: Permethrin* may be used selectively on gardening shoes and socks, once in spring to last the season.

Mosquitos: DEET outperforms many natural repellants for all mosquitos and ticks for the longest time. Considered safe by EPA. Use 6-7% for nuisance ones; use 25-30% in disease endemic areas. Natural products can be used: oil of lemon eucalyptus is on par with DEET; citronella is generally not as effective; neem is still being studied and shows a lot of promise; Catnip oil has been shown to be more effective than DEET; grapefruit seed extract/nootkatone is very promising but is awaiting EPA approval. For more on these, go to:
<https://www.sierraclub.org/sierra/5-deet-free-ways-protect-yourself-bugs>

READ LABELS!!

Anything labeled ORGANIC, USDA ORGANIC or OMRI-certified is OK. Check carefully if "natural" is the term used--it is usually NOT organic.

Bayer, Sygenta and Ortho products are usually suspect but occasionally they will be ok. Bonide products are 50/50, check label carefully.

Espoma products are 100% organic, as are Coast of Maine. Whole Foods carries a line of products that are 100% organic called Organic Mechanics. Spring Hill Nursery in Haverhill on Rt. 125 carries most of these organic items, as do some other nurseries around the state.

Avoid any products with **glyphosate**, which is used as an herbicide (ie Roundup).

Avoid **neonicotinoids (neonics)** which are used as insecticides: **imidacloprid is the most common, but also clothianidin, thiamethoxan, and acetamiprid.**

Also avoid ingredients that end in "-thrin" like permethrin* or cyhalothrin.

Horticultural oil smothers every critter on plants it contacts. Best if done as dormant oil spray off season. If in season, spray in evening or early morning before bees are active.

Resources

[Http://www.grownativemass.org](http://www.grownativemass.org)

www.xerces.org for pollinator plant information

Doug Tallamy, [Bringing Nature Home](#)

Maria Bartlett, Environmental Awareness, GCFM June 2019

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