Post-Brew and Tea Spraying CHECKLIST

Compiled by Stephanie Bartel during SARE research project. This checklist contains useful notes to bring into the field when first working with compost tea. A basic understanding/introduction to the brewing process is necessary to acquire before using this checklist.

- Tea or Extracts at 400x should have the following:
 - o 1000 bacteria per field
 - o 1 strand good hyphae per field
 - o 1 protozoa per field
 - o 1 nematode per drop (at 40x)
 - Look for anaerobic conditions! No bacteria clusters on fungi (they are anaerobic).
- Remove any screens or filters from sprayer, too. And check for any buildup on spray nozzle while spraying. Use largest nozzle size.
- Try not to screen your tea once it is finished, the fungi gets lost in any sediment that builds up on the screen.
- Check that the tea is good (enough Oxygen): fill a PLASTIC container half full, seal it, let it sit for 24s at 72F. When you open the container there should be no bad smells if it was nicely aerobic. (Too late to use it though, just a good check for reassurance).
- Water is only regarded as a carrier. You can dilute soil drench extracts as much as needed to get it out evenly. Better not to dilute foliage teas much.
- Add Mycorrhizal spores after the brew, just before spraying. They germinate within 4 hours or so, and once germinated they cannot tolerate any disturbance.
- Apply VAM spores in root vicinity or they won't work. Don't add to a soil drench, they won't quite reach the roots. Use in flat drench JUST before transplanting, and in the TP water tank.
- Add any foods (fish and kelp, molasses for brassica?) to teas just before/as you are spraying, not any earlier.
- Spraying during sunlight (on leaf surfaces) is okay IF the drop size is large enough (approx 1mm). To figure out drop size, pass your sprayer over a piece of paper and measure the drop size.
- No spraying during blossom (it bothers the bees trying to pollinate).
- Spraying Summary:
 - o 400 micron spray nozzle allows all fungal hyphae to pass through. Can use one a little smaller.
 - o Clean drip lines with 3-10% vinegar or 3% hydrogen peroxide.
 - o Pressure should be kept low relative to the distance from the leaf surface so the microbes can have a gentle landing rather than splatting onto the surface. 1-2Ft away=20-40 psi. 6 ft=100psi.
 - o Solo backpack sprayers usually are good.
 - Diaphragm pumps with boomjet nozzle (by teejet) at 35psi w/ 45' spray width is ideal. (always test new equipment though)
- Sprayers with a fine mist may be too small for microbe application.
- High pressure is no problem as long as it is far enough from the leaf surfaces to land gently.
- Wash compost tea bag in the dishwasher
- Foliar applications need to have really good coverage on all leaf surfaces, especially the undersides of leaves. Spray upwards and do a couple of passes if necessary.