

Mixing BiOWiSH® Crop Liquid into Liquid Fertilizers

Introduction

This technical bulletin describes the process for mixing BiOWiSH® Crop Liquid, contained in 1000L totes, into liquid fertilizers.

Equipment Needed

- 1000L BiOWiSH® Crop Liquid tote
- Hose A: PEBX hose with 2-inch NPT connector (tote to pump)
- Diaphragm metering pump
- Hose B: PEBX hose with appropriate connectors (pump to spray nozzle)
- Mixing tank equipped with a low shear, axial mixing impeller
- Liquid fertilizer

Procedure (Reference Figure 1)

1. Clean all equipment prior to use.
2. Ensure the BiOWiSH® Crop Liquid is well mixed (see the technical bulletin on Tote Mixing).
3. Connect Hose A to the NPT valve at the bottom of the BiOWiSH® Crop Liquid tote.
4. Connect Hose A to the diaphragm metering pump.
5. Connect one end of Hose B to the diaphragm metering pump and the other to the liquid fertilizer mixer.
6. Adjust metering pump to deliver the desired amount of BiOWiSH® Crop Liquid. BiOWiSH® Crop Liquid is dosed at 0.2% by weight or approximately 10mL/gallon (2.6mL/L) of liquid fertilizer. The exact volume will vary based on the specific gravity of the liquid fertilizer used.
7. Add the required amount of liquid fertilizer to the mixing tank and turn on the mixer.
8. Open the NPT valve on the BiOWiSH® Crop Liquid tote.
9. With the mixer running, turn on the pump and meter in the required amount of BiOWiSH® Crop Liquid. For a 1000-gallon batch, at 10mL/gallon, the required amount of BiOWiSH® Crop Liquid is 10L (2.6 gallons)
10. When the required amount of BiOWiSH® Crop Liquid has been added to the mix tank, turn off the pump and shut the NPT valve on the BiOWiSH® Crop Liquid tote
11. Continue mixing the liquid fertilizer for at least 2 minutes to ensure good dispersion of the BiOWiSH® Crop Liquid.

Figure 1: Equipment connection diagram

