# **Gelatinous Bait for Argentine Ant**

Instructions for preparing and deploying in vineyards





## **Materials Required**

#### **Bait Supplies**

- 1. Table sugar
- 2. Boric Acid (technical grade)
- 3. Polyacrylamide water storing crystals: 2-4 mm; Soil Moist, JRM Chemical
- 4. Water

### **Supplies for Measuring and Mixing**

- 5. Macrobin(s) with lid
- 6. Drill with stirrer attachment or similar tool
- 7. Bucket to measure sugar and water
- 8. Smaller container to measure crystals
- 9. Scale and container to measure toxicant
- Appropriate personal protective equipment (PPE)
- 11. Labels to attach to macrobin indicating contents (boric acid)

# **Bait Preparation**

Use this table to calculate component amounts (adjust accordingly if not using 100% boric acid)

Finished Volume	Water	Sugar	100% Boric acid	Polyacrylamide crystals	Target a.i. concentration
150 gal (568 L)	135 gal (511 L)	284 lb (142 L)	2840 g	8750 ml (7590 g)	
12 gal (45.4 L)	10.8 gal (40.8 L)	22.8 lb (11.4 L)	227 g	700 ml (600 g)	0.5%
2 gal (7.6 L)	1.8 gal (6.8L)	3.8 lb (1.9 L)	38 g	115 ml (99 g)	

# **Bait Mixing Instructions**

Add 1/3 of total water to macrobin

Add sugar to water in macrobin.

Stir continuously to dissolve.



A trolling motor may be used to stir the sugar.



Once sugar is dissolved, add remaining water.

Put on PPE and measure boric acid.

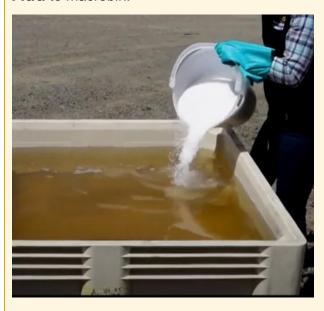
**Add** boric acid to small containter with water. **Mix** to dissolve completely.



**Add** boric acid to macrobin & **mix** thoroughly.

**Measure** the polyacrylamide crystals.

Add to macrobin.

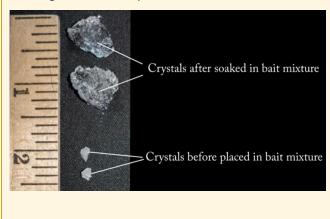


Cover macrobin.

**Affix** appropriate labels indicating pesticide.

**Wait** 12 hours (or overnight) for water-storing crystals to expand and absorb bait mixture.

Crystals should be fully expanded but not floating in excess liquid.



## **Apply the Bait**

Attach spreader to ATV or tractor for broadcast application.



**Calibrate** the spreader to apply 10 gallons of hydrated crystals per acre.



**Apply** hydrated crystals in alternate rows.

**Plan** to make 2 applications, at 4 to 6-week intervals in spring.

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#### Watch the Video

"Mixing Gelatinous Bait Targeting Argentine Ants in Vineyards" www.youtube.com/watch?v=mg9cN6F2Gb0



### **Additional Resources**

Mealybug and vineyard ant identification, detection, and monitoring:

<a href="https://ucceviticulturenapa.wixsite.com/uccevit">https://ucceviticulturenapa.wixsite.com/uccevit</a>

<a href="https://ucceviticulturenapa.wixsite.com/uccevit">napa</a>

#### References

Cooper M., M. Hobbs, C. Boser, L. Varela. 2019. Argentine ant management: using toxin-laced polyacrylamide crystals to target ant colonies in vineyards. Catalyst 3:23-30.



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