

Lima Bean-based, Agar Diet – 36-Liter Batch: Codling moth, *Cydia pomonella*

1. Day before, set up:

- Set up 100 trays [30 1-ounce cups per tray; 3,000 cups (PI-1)]
- Measure following diet ingredients

	36 Liter Batch	Slurries (n=7)
A. Water	29.0 L (19.2L in kettle)	1600 ml
Agar	550 g	
*B. Lima beans, ground (dry wt.)	5,137 g	734 g
Yeast, Brewer's, debittered	1,026 g	147 g
Sugar, Cane	684 g	98 g
Wheat Germ	684 g	98 g
<i>*B. Components in 7 equal parts in plastic bags for slurries</i>		
*C. Ascorbic Acid	104 g	
Methyl Paraben (MPHB)	104 g	
<i>*C Components dissolved in 400 ml 95% ETOH in 900 ml beaker</i>		
D. Linseed Oil	226 ml	
Formaldehyde (37% stock)	36 ml	

2. Steam kettle, pump, and mixer:

- Valves are ball valves (parallel is "OPEN"; perpendicular is "CLOSED")
- Check that fluid level is between Min. / Max. in site glass
(If not, add Groen® Water Treatment Solution to bring up to level)
- Flush entire system with water to clean system and prime pump; open/close valves
- Drain system and close the Kettle Drain Valve
- Open Flow Control Valve; Close both Dispensing Valves

3. Diet Preparation Method (36 Liter batch):

- Fill kettle to 19.2 Liter mark
- Turn kettle power switch "ON" and kettle control knob to "10"
- Turn mixer motor power switch "ON"
- Turn Recirculation Pump switch "ON"
- Add agar to water in kettle; stir and heat until melted and in solution (about 15 minutes)
- Check pressure gauge; vent if exceeds 15 psi
- Check agar periodically; proceed when agar has melted
- Turn kettle control knob down to "2"
- Prepare 'B' components (in 7 parts) as follows for each slurry:
 - In blender, mix one bag of 'B' components and 1400 ml water; blend for 1 minute
 - Add to kettle and stir with large whisk, as necessary
 - Add 'C' and 'D' components to kettle after 4th or 5th slurry; stir with whisk
- Stir periodically with large wire whisk (!!!USE CAUTION AROUND MIXER SHAFT!!!)
- If diet is too thick, add 1 to 2 liters of water

4. Dispense diet immediately:

- Hook up Dispensing Hose to Dispensing Valve
- Adjust ball valves to obtain proper pressure from Dispensing Gun
- Dispense diet into 1-ounce cups in trays; fill cups about one-half full
- Fills about 90 trays with 30 cups per tray (about 2700 cups)