Pest Management Plan

Honeydew Ranch, LLC Mossy Stone Creek, LLC Natural Ascent, LLC APN#: 107-272-005

Application Number: 12256, 11950, 11954

CDFA Cultivation Licensing:

CCL18-0003046 CCL19-0005637 CCL19-0005638

Cultural Pest-Management Control Methods:

- Focusing on the overall health of the plants in cultivation area to help prevent spread of disease and protect plant against disease.
- All vegetation around cultivation areas are cleared to prevent/control the colonization of pests.
- General cleanliness in cultivation areas.
- Enhancing natural pest enemies such as lady bugs, praying mantis', and predatory mites are used to prevent pest population from infesting the cultivation area
- Green Houses are enclosed to reduce pest entry.
- Filters are used on intake fans to reduce pest entry.
- Maintaining the health of native trees and plants surrounding the cultivation area to control the spread of pest issues.

Biological Pest-Management Control Methods:

- Accurate identification of the pest species and confirmation of the pest as a target for biological control.
- Insect traps are placed throughout the cultivation and surrounding areas to identify pests and to determine the need to apply chemical treatments
- Surveys for natural enemies (generally insects, mites, nematodes and diseases) are conducted in the area of origin of the pest (usually overseas).
- Determine host-specificity of potential control organisms to assess impact on targets and nontargets and environmental safety.
- Following approval from federal and state regulatory officials, biological control
 agents are shipped to a domestic quarantine facility where they are examined to
 confirm species identity and to determine whether they are free of parasites and
 diseases.
- These agents are tested in field plots to determine that the agents do reduce densities of the target pest and do not have adverse effects on nontargets. Once this small-scale testing is completed, appropriate natural enemies can be measured to high numbers and released at field sites established by county biologists.

- Once released, each biological control agent is evaluated for establishment, spread, impact on the target species, and impact on nontarget species. Careful, long-term evaluation studies provide scientific data that are used to improve current and future programs. Additional releases may be made in an augmentative manner in systems where long-term stability of the natural enemies is not feasible.
- Use of natural pest control products such as Diatomaceous Earth surrounding the perimeter of the cultivation area, surround the base of the plants.
- The use of Frass to assist with plant health and pest colonization.
- Applying foliar spray of beneficial teas and microorganisms to the plant vegetations to interfere with pest reproductive cycles.

Chemical Pest Management Control Methods:

- All Products used are on the approved list provided by CDFA, the State of California Ag Commission, and Federal Ag Commission and Humboldt County Ag Commission.
- A file with all MSDS of these products is located in the Pesticide storage area.
- Proper mixing ratios are used to assure the safety of employees and environment. Mixing instructions are posted in Pesticide mixing area.
- Employees are trained on proper handling and use of all pesticide on site.
- Employees must wear proper protective gear when applying any pesticide. This includes protective eye, skin and breathing equipment.
- All pesticides are applied according to manufacture recommendation.

Chemical(s) to be applied at any Stage of Plant Growth

Product Name:	Ingredients			
Diatomaceous Earth	33% silica, 19% calcium, 5% sodium, 3% magnesium and			
	2% iron, boron, manganese, titanium, copper and zirconium			
Organic Neem Oil	100% Cold Pressed Neem Oil			
Green Cleaner	soybean oil, sodium lauryl sulfate, citrus acid.			
Nuke 'Em	Active Ingredients			
	Citric Acid .05%			
	Inert Ingredients			
	Water, Yeast (Enzymes), Potassium Salts of Fatty Acids,			
	Sodium Benzoate, Potassium Sorbate			
Dr. Zymes	Active Ingredient: Citric Acid .05%			
	Inert Ingredients: Water, Yeast, Potassium Sorbate 99.95%			
Trifecta	Active Ingredients: Thyme Oil: 14%, Clove Oil 10%, Garlic			
	Oil 9%, Peppermint Oil 4%, Corn Oil 3%, Geraniol 3%, Citric			
	Acid 2%, Rosemary Oil 2%			
	Inert Ingredients: 53% filtered water, soap, isopropyl			
	alcohol, vinegar			
Plant Therapy	Active Ingredients: organic soy oil 38%, organic			
	peppermint .5%, Citric Acid .25%			
	Inert Ingredients: purified water, isopropyl alcohol, soap,			
	sodium citrate			