

## BORNT FARMS

### 2011 EYE GNAT NUISANCE PREVENTION PLAN

In accordance with San Diego County Code of Regulatory Ordinances Title 6, Division 4, Chapter 2, Section 2 it is my/our intention to prevent and control eye gnats on the Bornt Farm located in Jacumba utilizing the following prevention method(s) as recommended by the University of California:

#### PREVENTION METHODS

Bornt Farms will implement the following prevention methods during 2011:

##### ***Buffer Crops*** (formerly referred to as *Trap Crops*)

- Create an eye gnat exclusion zone by removing farm production approximately 100 feet in from the outer farm edge that borders the community. This zone will contain twelve total rows of production dedicated to buffer crops only.
- The mature plant type will be recommended by the farm and approved by County Vector Control.
- The buffer crop can be cut as short as necessary so that the crop does not need constant cutting or mowing. If the plants in the buffer crop are cut or trimmed they need to be cut in rotation so that there are at least six full rows parallel with the community that are 2-4 feet or taller at any given point in time, to allow for treatment by conventional equipment
- Buffer crops will be treated with a UC Cooperative Extension recommended conventional pesticide on a weekly basis. The current recommendations include rotating with carbaryl, acephate and cyfluthrin. Current pesticide records must be available for reviewing on the farm during weekly inspections.
- Conventional pesticide applications will be kept at acceptable distances from organic crop production to prevent drift.
- Separate application equipment will be used to treat organic crops.
- No production crops should be planted until adequate buffer crops of at least six full rows of mature trap crops at 2-4 feet in height are in place. Unfortunately Mr. Bornt has planted his crop and the buffer crop is not mature. The UC Cooperative Extension recommends that the farm begin applying pesticides to the buffer crop in April. Mr. Bornt believes the buffer crop will be one foot high by then, thereby meeting the intent of this requirement.
- Buffer crops will be maintained and watered.

##### ***Barriers***

- The barrier between the farm and the community will be maintained for the entire length of crop production. Wherever crop production occurs, there will be an erosion or dust barrier, made of a tightly woven cloth or plastic, of at least 36-inches in height and parallel with the border of the community starting at the southern end of the farm and going north to the large wash and extending along the wash and around the bend for an additional 600 feet. An example is the barrier that was present in 2009, but in compliance with the conditions stated above.

## **Trapping**

- Eye gnat trapping will occur no higher than 36 inches since the majority of eye gnats at the farm are captured near ground level.
- Traps on that farm will to be monitored and maintained by Bornt Farms on a weekly basis, i.e. addition of new solution, replace broken parts, etc.
- The following methods in place during the 2010 season will be maintained:
  - 1) A double row of collar traps 10 feet apart and parallel with the community border,
  - 2) The first row of collar traps will be 10 feet from the black erosion barrier, and the second row that parallels the first will be staggered. Both rows will be within the treated buffer crop and will extend from the southern most end of crop production to the northern most end of crop production.
  - 3) Additional traps will be added by the Farm as determined necessary by Vector Control. The farm can increase the number of traps for additional deterrence.
- To enhance the capture and removal of eye gnats from the population and provide further relief to the community, County Vector Control will assume the responsibility for increased trapping in the community. Research results from 2009 suggest that the eye gnats are concentrated 1,000 feet on either side of a line that separates the farm and the community. Therefore, trapping will be conducted on a grid that extends 1,000 feet into the community beginning in the community at the south most end of farm production to the north most end of the community by the railroad tracks (see rectangular area in Figure 1). The density at present is 1 trap per 1,000 linear feet (white box in Figure 1 represents the 12 in-town traps on a 1,000 foot grid). County Vector Control will increase the traps to a minimum of 4 traps per 1,000 linear feet. In addition, County Vector Control will trap at two specific locations with concentrated eye gnat populations; the spa and the school (see smaller rectangular areas on Figure 1). The Bornt Farm designed trap is highly effective, and will be used for community trapping
- County Vector Control will monitor and count the number of eye gnats in some of the community traps weekly.
- Trapping will begin when production crops are first planted and be continued throughout 2011, until all production crops are harvested and planting ceases.

## **CULTURAL CONTROL METHODS**

- **Dry Period** (formerly referred to as *Fallow Period*)  
Utilizing a dry period during the hotter months of the year (during June, July, August and September) will break the generational cycle and reduce eye gnat populations. The farm will successively drop portions of the farm out of production during these months and place back into production at its discretion, so long as each block on the farm is out of production in a 'dry period' for at least a continuous 6 weeks between the months of June, July, August and September. The farmer will notify County Vector Control during the inspection the week prior to placing a block in the 'dry period'.
  - No water/irrigation will occur on blocks taken out of production during the 6 week continuous dry period. However, other farming operations can be conducted as normal, fertilizing, bed shaping, etc.
  - For the crop to be considered in the 'dry period' the crop must be harvested requiring no more watering and fresh organic matter will not be tilled under into the soil. The

farmer will reduce organic matter production by drying the cut crop or burning the crop residue on the bed.

- Weeds will be controlled by herbicides or by hand, not tilling.
- Fresh organic matter will not be tilled under into the soil. Organic matter will be reduced by drying the cut crop until it flakes when crushed or by burning the crop residue on the bed.
- Weed control outside the crop will be controlled with herbicides or by hand, not tilling.

### **SELF REPORTING**

Bornt Farm agrees to report the following to the County's Vector Control Program:

- Initial planting of the production crops and buffer crops.
- Completion of the placement of traps.
- Confirmation when the farm begins the dry period at a minimum during the inspection the week prior to placing a block in the 'dry period'.

**Figure 1**



All of the measures in this Plan will be subject to inspection by County Vector Control staff prior to Bornt farms planting production crops and at any time during 2011. County Vector Control will conduct weekly, random inspections to monitor compliance with the Plan.

County Vector Control will post inspection reports, enforcement letters and this Plan on its webpage for the purpose of communicating Bornt Farm's compliance to the neighboring community.

Any requests to make changes to this Plan must be made in writing from Bornt Farms to County Vector Control and County Vector Control will respond to the request within 5 working days of receiving the request.

Alan Bornt Alan Bornt

Date: 3/11/11