

Pepper Weevi (*Anthonomus eugenii*) Double-Blind Testing Proposal.

The Pepper Weevil, *Anthonomus eugenii* feeds and lays eggs on the genus Capsicum and a few species of Solanum (Solanaceae) plants. It is an important pest of Capsicum in parts of North America, and Central America and can inhabit climate controlled green houses in other areas where they are not native.

Anthonomus eugenii

2. Test Set Up Procedure

A. Hides

- i. Hides used in this test are to contain a varying number of live adult insects, numbering no less than five (5) and no more than ten (10) to present varied amounts of odor in search scenarios. The hide should contain should include insects with no substrate or materials inside vials or containers.
- ii. No containers or insects or substrate or any other items or materials are to be used in these tests that have ever been treated with or exposed to any pesticides of any type or form whatsoever, whether natural, chemical or any other method.
- iii. No pseudo scents or scented toys are allowed for use in testing scenarios.
- iv. Hides are to be placed in scenarios and allowed to remain there for a minimum of thirty minutes prior to beginning testing.

C: Area Search Phase

1. The Area Search Phase is to consist of 4 distinct areas, no less than 100 sq ft in size. Each area will be assigned a unique number of one through four.
2. Each area shall contain a minimum of 10 plants.
3. No one area will contain more than one hide.
4. A minimum of one of the areas will be "blank", in that no hides will be placed in that room.
5. A minimum of one room will contain a hide placed in accordance with the procedures outlined below.
6. Number of Hides to be Placed – To determine the number of rooms containing a hide, a twelve sided die, or a random number generator is used. The result of this roll is to be recorded on the Test Setup Form.
 - i. If a one, two, three, or four is rolled, one hide is to be placed in one of the areas, and the other three areas are to be blank.
 - ii. If a five, six seven or eight is rolled, two hides are to be placed in two of the areas and the other two areas are to be blank.
 - iii. If a nine, ten, eleven or twelve is rolled, three hides are to be placed in three of the areas, and the fourth area is to be blank.

7. Identifying Areas in which Hides are to be placed. – To determine which areas will contain hides a twelve sided die, or random number generator is used. The results of each roll are recorded on the Test Setup Form.
8. Hides must be placed no less than 6" from the ground and no more than 36" from the ground.
9. Hides must be hidden as much as possible using existing plants.