



# Field Test protocol

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## Condition-dependent test

### Material reception

In order to perform field test, you will receive experimental material by mail. Please, make sure of the reception of 13 zip lock bags 5cm x 5cm, each containing a blotting paper, annotated as follows :

Name	Quantity
Molecule E	5
Molecule D1	7
Molecule A1	1

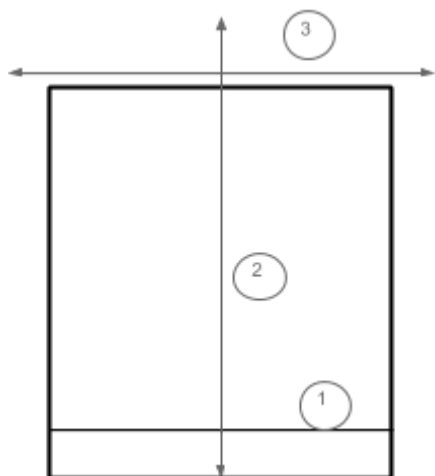
### Material not provided

In order to perform experiments, you will need equipment that we will not be able to provide :

Name	Quantity	Description
Food bait	3	You could use a food bait of your own invention or made from beer, honey and beeswax.
Lure	1 to 3	The lure must be an exact synthetic copy of an Asian hornet, or a dead Asian hornet, which will be placed in the trap. This lure can be reused.

## Material arrangement

To arrange experimental material in traps, please proceed as follows :



- 1) Open the zip lock bag,
- 2) Then introduce into it scissors to cut according the draw above,
- 3) First cut the extremity of the zip lock bag according to the instruction 1 on the draw,
- 4) Move the cut edges of the zip lock bag aside,
- 5) While maintaining the blotting paper in the zip lock bag and place the set into the trap.

### Precautions of setting up

- Be sure to use gloves (disposable) during the opening of zip lock bag, and avoid direct contact with the inside of the zip lock bag. The molecules placed on the blotting paper are likely to attract Asian hornets, even to trigger attacks.

The To Bee... Hornet to Bee team is not responsible for potential attacks resulting in an incompatible use of the material provided with the protocol.

- Be sure to perform the experiments and place our material in the traps close to attacked apiary and hives by Asian hornets. The aim is not to attract Asian hornets in apiary or hives not yet attacked.

The To Bee... Hornet to Bee team is not responsible for the trigger of Asian hornet attacks on hives and apiary not yet attacked, resulting in an incompatible use of the material provided with the protocol.

## Experiment proceedings

- Each test should be performed by placing the indicated zip lock bag, open as explained previously, in a trap within a maximum of 5 meters perimeter around the hives.

- To each test, two traps will be used simultaneously. One always containing the molecule E and the other containing the molecule cited. The two traps should be separated by at least 2 meters.
- Each test is done on 24h. After 24h, the traps must be removed, corked and placed into the freezer long enough for the insects to be dead. The traps must be emptied out and the insects present in each trap must be counted. Finally, the zip lock bags provided and placed into the trap must be thrown away. The trap must be cleaned cautiously.

Note : The zip lock bags containing the molecule E don't ever be placed into a trap having already served for testing another molecule. It is recommended to always use the same trap(s) to test the molecule E.

The experiments will take place in 5 steps, in order to test different conditions : The tests must be performed in the given order.

**Test 1** : Trap with the molecule E beside the hives VS trap with the molecule D1 beside the hives VS trap with food bait beside the hives.

**Test 2** : Trap with the molecule E beside the hives VS trap with the molecule D1 + lure beside the hives VS trap with molecule D1 alone beside the hives.

**Test 3** : Trap with the molecule E beside the hives VS trap with the molecule D1 + lure beside the hives VS trap with molecule D1 beside the hives VS trap with food bait beside the hives.

According to the most effective trap :

**Test 4** : Trap with the molecule E beside the hives VS the most effective trap (previous test) beside the hives VS the most effective trap (previous test) away from the hives.

**Test 5** : Trap with the molecule E beside the hives VS trap with food bait + molecule A1 beside the hives.

## Results

The results must be recorded in a document which should be returned in PDF format to the address : [igempoitiers@gmail.com](mailto:igempoitiers@gmail.com).

The name of the document should be in this form : last name-first name-region of the test-condition dependent test.pdf

**iGEM Poitiers team - To Bee... Hornet to Bee thanks  
you for your contribution to the project.**



<b>Name</b>	<b>Concentration</b>
Molecule D1	100 000 ng/ $\mu$ L
Molecule A1	1 000 000 ng/ $\mu$ L

Annex 1 : Concentrations of test molecules