

The BROCAP® trap



A novel solution
for controlling the coffee
berry borer



The coffee berry borer (CBB), *Hypothenemus hampei*, is a major coffee insect pest. As traditional control methods have their limitations, an economical environment-friendly solution is proposed.

Limitations of chemical control

Insecticide use has well-known drawbacks:

- the risk of toxic residues,
- insecticide with limited selectivity, destroying CBB natural enemies,
- CBB resistance to insecticides.

The BROCAP® trap is an effective integrated control instrument

With its design adapted to the insect's biology and its powerful attractant mixture, the trap effectively reduces CBB populations in coffee plantations.



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Ripe, healthy cherries on the branches of a coffee tree.

Advantages of the BROCAP® trap

Using the BROCAP® trap means:

- Exchanging the traditional concept of CBB control for a totally integrated solution adapted to quality coffee production.
- Improving producer incomes.

In quantity terms

- 10 to 16% increase in the weight of green coffee yields.


In quality terms

- Production of guaranteed pesticide-free coffee.
- Fewer beans damaged by CBB, so less risk of contamination by mycotoxin producing fungi.
- Preserves the environment and biodiversity.
- Through reduced pesticide doses.
- Through selective trapping: 97% of the insects caught are coffee berry borers.



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Brocap® trap

 BROCAP® has been jointly developed by CIRAD and PROCAFE



French
Agricultural
Research
Centre
for International
Development

**Tree Crops
Department
Coffee
Programme**

Boulevard
de la Lironde
TA 80 / PS3
34398
MONTPELLIER
Cedex 5
France
cafe@cirad.fr

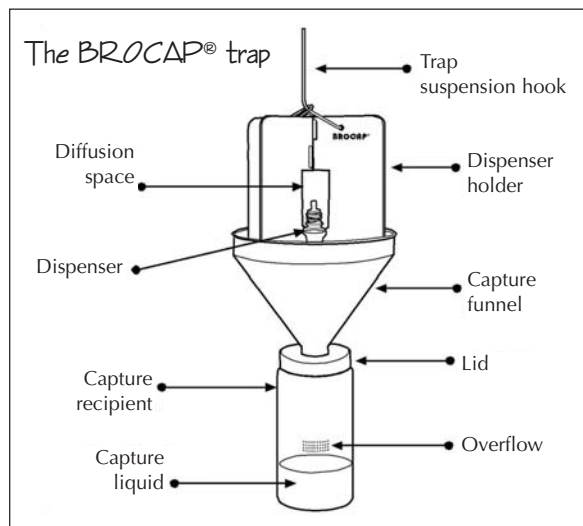
Trap description

- Top, the **funnel** with red blades, a colour that attracts coffee berry borers.
- Centre, the **dispenser** containing the **volatile attractant**.
- Bottom, the **capture recipient**, transparent for visual inspection.

Trap efficiency

Trap efficiency has been confirmed by tests in several countries, notably in certain regions of El Salvador.

Up to 10,000 CBB caught per trap per day in a major migration period, in highly infested regions!



Treatment	Bored fruits at the start of infestation (%)	Bored fruits in the first harvest (%)	Reduction in CBB populations trapping/control (%)	Harvest improvement by green coffee weight (%)
Trapping	1.01	4.60	81.06	16.3
Control	4.46	13.20	—	—



Coffee berry borer damage.

An economical solution

The trap is cheap to buy and amortized over several years, so it is cheaper to use than insecticide treatments.

Packaging

Traps: in boxes of 36 units.

Dispensers: in boxes of 36 units.

The first time, for 2 hectares or 3 manzanas, one box of 36 traps and two boxes of dispensers (72 dispensers in all) are required. Thereafter, dispensers can be obtained separately for replacement.

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BROCAP® is a patented trap and registered trademark.

Recommended use

When should traps be installed?

In the post-harvest period, when CBB populations are preparing to leave residual fruits to seek new food sources.

The traps are installed for 4 months each year; e.g. from the beginning of March to the end of June in El Salvador.

When should the dispenser be replaced?

After around 2 months' use. Two dispensers will therefore be required per season.

How many traps, installed how?

At least 18 traps/hectare (12 traps/manzana), 24 metres apart and 1.20 metres from the ground.

Should the traps be replaced each year?

No. The trap can be reused for several years.

For further information

CIRAD
 Tree Crops Department
 Export service
 Telephone: +33 4 67 61 75 65 / 66
 Fax: +33 4 67 61 71 20
 brocap@cirad.fr