

The BROCAP® Trap

FOR THE CAPTURE OF THE COFFEE BERRY BORER



Decrease in crop losses of coffee harvests



Valuation of "pesticide-free" practices



Optimizing the cost effectiveness of pest control



Improvement of the environmental impact

The Approach

Plant Health Institute Montpellier (PHIM) accompanies the sectors for a better risk management, prediction of damage related to diseases and pests, and to help in the decision making process on the actions to be taken.

BROCAP® is a patented device, initially developed by PHIM at CIRAD, in the framework of the CIRAD/Procafe cooperation. It offers a non-chemical control strategy alternative, efficient against the coffee berry borer when combined with good agronomic practices.

Currently manufactured in Indonesia, it is distributed by IndoCafCo (a subsidiary of the Ecom group) and is continually being improved structurally and functionally. Its usage, which was reserved for Arabica coffee for a long time, now extends to Robusta coffee.

Our assets

- ▶ A team of experts to deal with all issues related to the emergence and development of bioaggressors.
- ▶ A strong national and international visibility, especially in tropical and Mediterranean regions.
- ▶ A cost/benefit approach combining technical solutions and improvement of producers' practices.
- ▶ The involvement of one of the major players in the coffee industry for the dissemination of biocontrol solutions.

A solution combining a technical solution and an integrated agro-ecological approach to:

Optimize pest capture with up to 10,000 captures per trap per day

Improve the yield up to 12% in green coffee weight

Make the investment profitable with an efficiency/cost ratio more advantageous than chemical control

Respect "useful" biodiversity with a specificity for the coffee berry borer reaching 97%.

Avoid through complementary recommendations, the proliferation of new generations of coffee berry borer



ECOM - www.ecomsms.com

A trap against the coffee berry borer for ECOM's partner producers

ECOM, the world's second largest coffee trader, provides inputs and services to coffee growers in over 40 countries around the world.

In 2002, the company, interested in the development of Arabica hybrids, requested a commercial partnership with CIRAD teams.

The challenge.

What technical solution should they offer their partner producers to reduce crop losses caused by coffee berry borer, an insect pest, and produce quality coffee without the use of pesticides?

The idea.

To develop an innovative pesticide-free solution to control the coffee berry borer so that ECOM can offer its partners an effective protection of their crops.

The Support

- Provision of technical experts from CIRAD to design an adapted innovative solution.
- Development of a complete control strategy against the coffee berry borer (from prevention to elimination) including a trapping solution.
- Co-creation of an in vitro culture laboratory, which deploys somatic embryogenesis as a method for large-scale multiplication of plant material.
- Transfer of the solution under an exclusive license BROCAP®.

RESULTS

- Distribution of approximately 50,000 BROCAP® traps in Indonesia and Papua New Guinea.
- Support provided to more than 2,000 coffee farmer.
- Improvement of the trap in 2019 to significantly increase capture performances.

Improvements to the system made on an ongoing basis

- Fine-tuning of the device
- Improvement of the attractant
- Implementation of the "Triple Action IPM"
- Adaptation to different agroclimatic zones
- Creation of the COMPACT version

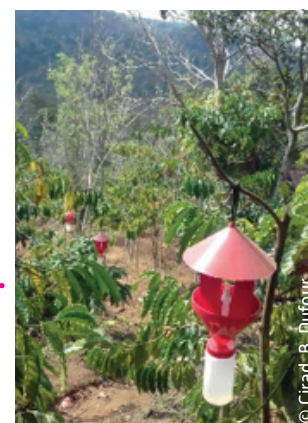
Brocap - a well thought-out design for maximum effect

A powerful attractant combined with the trap's red color form the essence of the capture principle, whose effectiveness has been enhanced by a device designed with the greatest precision:

- The bladed structure holds the attractant dispenser,
- The wide-diameter conical container provides easy access for coffee berry borers,
- The water in the capture container drowns captured insects,
- The cover protects the trap entrance from rain and falling plant debris.



Packaging of the BROCAP® COMPACT (25 units per box)



Trapping device in plantation