#### vynhupj ChnypjáLÁáyl på ÀÃģắć CÁắæÀà CLấÀOC chupes ć

#### KAPAR<sup>®</sup>MFF Mediterranean Fruit Fly Traps KAPAR<sup>®</sup>SC Scarab Beetle Pheromone Traps

KAPAR® Pheromone Traps against Warehouse Pest Moths

**KAPAR®OFM** Pheromone Traps in Oriental Fruit Moth Control

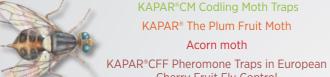


KAPAR®TL Pheromone Traps in Tomato Leafminer Control KAPAR<sup>®</sup>CM Codling Moth Traps

> KAPAR<sup>®</sup> The Plum Fruit Moth Acorn moth

Cherry Fruit Fly Control KAPAR®WST White Sticky Trap in Fruit Sawflies

Forest Pests







KAPAR®RPW Red Palm Weevil Pheromone Traps KAPAR<sup>®</sup>EGM European Grapevine Moth Traps KAPAR<sup>®</sup>YST Yellow Sticky Trap Fighting flies in the greenhouse without pesticides KAPAR<sup>®</sup>BST Blue Sticky Trap in Thrips Contro Sticky UV-Light Traps KAPAR<sup>®</sup>BB Bark Beetles Pheromone Traps KAPAR®BB Pheromone Traps in Bark Beetle Control KAPAR<sup>®</sup>CB Cotton Bollworm Pheromone Traps KAPAR<sup>®</sup>OLM Olive Leaf Moth Pheromone Traps KAPAR®OM Olive Moth Pheromone Traps KAPAR®OFF Olive Fruit Fly Trap KAPAR<sup>®</sup>PTM Potato Tuber Moth Pheromone Traps



**ORGANIC AGRICULTUREC** på ÀÃắắć CÁắæÀà CLáÀOC ở mpæả ć

# **BIOTECHNICAL** CONTROL

### WITH PEST INSECTS

Pheromone traps are used in mass catch and diversion techniques to determine the time of control.

**KAPAR<sup>®</sup>BB** 

### **BARK BEETLE TRAPS**



(>K>LM₄<BE>K19G9FBB1Bb4LB19K9R+9@2. 9=. +H.2906980(8 + / + (0 / 230("7)))



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## KAPAR®BB BARK BEETLE TRAPS

**Scientific Name:** Dalkıran (*Xy-laborus dispar*) Daldelen (*Lymantor coryli*)

#### Host Plants: Hazelnut

Shot-hole borer and lymantor coryli are among the shot hole borer (bark beetle) species that cause significant damage to fruit and forest trees all over our country. These are the most important pests of hazelnut fields in the Black Sea region. These pests spend the winter in the galleries they open on the hazelnut branches during the adult period. From March onwards, the average daily temperature reaches 18-20 degrees. So they come out of the galleries where they spend the winter, mate and the mating females lay their eggs in the galleries they open in the hazelnut branches. The going out of the adults from the galleries, in the spring; It is seen in March, April, May, and in summer from June to the end of September.



Flights are not regular and are in the form of collective flights depending on the air temperature. They give one offspring per year.

#### Type of Damage

The adult of the shot-hole borer pest enters the trunk of the branch by making a hole with a width of 2 mm. The pest opens transverse and longitudinal galleries in the branches, causing the hazelnut branches to dry out and the gardens to be completely lost over time.

The shot-hole borer pest spends most of its life in the galleries it opens in hazelnut branches. In April, the temperature reaches almost 18-20 degrees. The adults start to emerge from this month in order to mate and lay eggs in the spring and continue until the end of August. For this reason, it is not possible to control with medicine achieve the desired success by only using pesticides against the shot-hole borer pest.

#### **KAPAR®BB** Traps

Bark beetle traps consist of two parts. Two red colored plastic sheets of 20-25 cm, coated with KAPAR<sup>®</sup> Insect Catching Glue, and a hung chamber underneath. Attractive mixture.

#### **Type of Using Traps**

Two red colored sheets coated with KAPAR<sup>®</sup> Insect Catching Glue are taken out of the package and intertwined as seen in the picture. Under the color traps, the empty chamber, which comes out of the package, is attached. The attractant mixture is mixed with water at a ratio of 1/1 and 0.4 L of the mixture is added to each empty chamber. When the traps are ready, they are hung on the land when the temperature rises above 18 degrees. The traps are checked once a week and a new one is added instead of the decreasing attractant.

#### Monitoring

These traps should be hung in hazelnut gardens as 3-4 pieces per decare in June-July and August when pests coming out is high.

#### **Mass Catch**

KAPAR<sup>®</sup>BB (Bark Beetle) Trap is hung on the hazelnut branches at 15-20 m intervals in the garden and at a height of 1-1.5 m. Trap chambers are checked once a week and an attractant is added as much as the decreased amount. When the red color traps are filled with insects, they should be replaced with a new one.

### Usage and Storage Conditions of Traps

• Traps should be checked at regular periods.

• When the temperature exceeds 18 degrees, it is hung on the branches of the south of the trees and at a height of 1-1.5 m from the ground.

• When the attractive mixture decreases, a new one is added instead.

• When the red color traps are filled, they should be replaced with a new one.

• Traps can be stored in their original pack in a cool place for 2 years.

