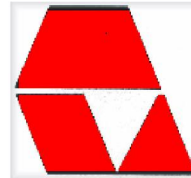




UNIVERSITATEA BABEȘ-BOLYAI
BABEȘ-BOLYAI TUDOMÁNYEGYETEM
BABEȘ-BOLYAI UNIVERSITÄT
TRADITIO ET EXCELLENTIA

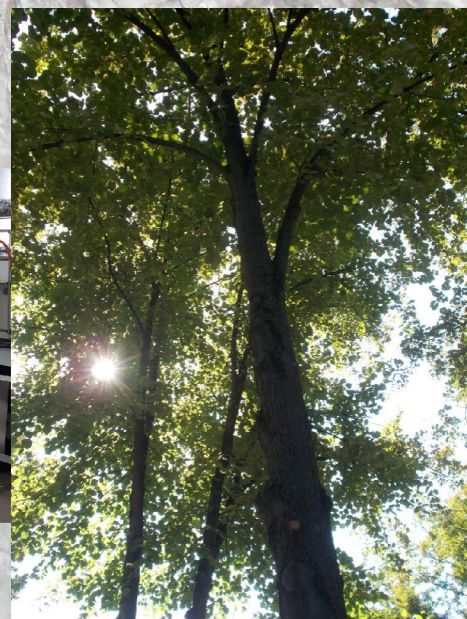
Institutul de Cercetări în Chimie
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PHEROMONE PRODUCTION CENTER

Research • Product Development • Production



2019

Pheromone Production Center of the “Raluca Ripan” Institute for Research in Chemistry affiliated to “Babeş-Bolyai” University has more than 30 years of experience in **research, product development** and **production** of pheromone products and traps to detect and monitor insect pests and promote sustainable **Integrated Pest Management (IPM)**.

RESEARCH

- continuous optimization of the synthesis and production processes
- continuous testing of new pheromone mixtures to increase their activity and efficacy
- improvement of the materials used for the pheromone lures and dispensers

PRODUCT DEVELOPMENT

- expansion of our product range with new product types taking into consideration the new pests appeared in the country and the market demand

PRODUCTION

- synthesis of pheromone compounds at laboratory and pilot scale
- production of pheromone lures and dispensers
- production of insect traps
- production of adhesive
- dynamic increase of productivity based on the orders of our customers and the evolution of the insect pests in Romania

At this moment we have **60 types of pheromone dispensers and lures** on market for forest pests, orchards, field crops, vineyards and stored product pests.

Advantages of Pheromone Products

- They are very specific
- They are ecological, non-toxic to humans and environment, are biodegradable
- They cover a wide area, and have a long lasting action
- They do not give resistance

Pheromone dispensers for Bark Beetles



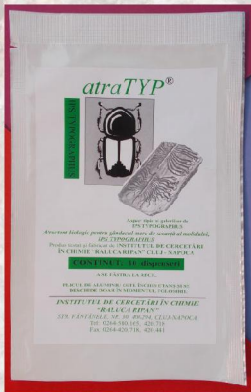
Ips typographus



Polyethylene dispensers



Pityogenes chalcographus



atraTYP®

Pest: European Spruce Bark Beetle - *Ips typographus*

Host plants: Spruce

Field activity: 6-8 Weeks

Application: Detection and Monitoring

Trap: Ipidis barrier trap



atraCHALC®

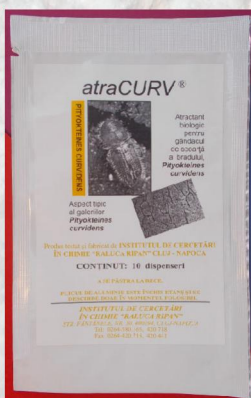
Pest: Sixtoothed Spruce Bark Beetle - *Pityogenes chalcographus*

Host plants: Spruce

Field activity: 6-8 Weeks

Application: Detection and Monitoring

Trap: Ipidis barrier trap



atraCURV®

Pest: Silver Fir Bark Beetle - *Pityokteines curvidens*

Host plants: Fir

Field activity: 6-8 Weeks

Application: Detection and Monitoring

Trap: Ipidis barrier trap



atraDUP®

Pest: Double-Spined Bark Beetle - *Ips duplicatus*
Host plants: Spruce
Field activity: 5-6 Weeks
Application: Detection and Monitoring
Trap: Ipsids barrier trap



atraMONOCHAM

Pest: Sawyer Beetles - *Monochamus spp.*
Host plants: Conifers
Field activity: 5-6 Weeks
Application: Detection and Monitoring
Trap: Ipsids barrier trap



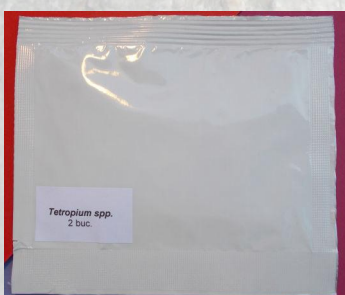
atraLINEA

Pest: Striped Ambrosia Beetle - *Trypodendrum Lineatum*
Host plants: Conifers, Pine, Larch
Field activity: 13 Weeks
Application: Detection and Monitoring
Trap: Ipsids barrier trap



atraHYL

Pest: Large Pine Weevil - *Hylobius Abietis*
Host plants: Conifers
Field activity: 6-8 Weeks
Application: Detection and Monitoring



atraTETROPIUM

Pest: Silver Fir Bark Beetle - *Pityokteines curvidens*
Host plants: Fir
Field activity: 6-8 Weeks
Application: Detection and Monitoring
Trap: Ipsids barrier trap

Pheromone lures for Forest Moths



Tortrix viridana



Red bromobutyl septa



Lymantria monacha



atraLYMON®

Pest: Nun Moth - *Lymantria monacha*

Host plants: Spruce, Pine and other conifers

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: White sticky boards dim. 30 x 40 cm



atraVIR®

Pest: European Oak Leafroller - *Tortrix viridana*

Host plants: Oak

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps



atraLAR

Pest: Western Larch Case-Bearer - *Coleophora laricella*

Host plants: Larch

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps or Tetra traps



atraBUOL

Pest: European Pine Shoot Moth - *Rhyacionia buoliana*

Host plants: Pine

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps or Tetra traps



atraRUF

Pest: Red-Headed Fir Tortricid - *Semasia rufimitrana*

Host plants: Fir

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps or Tetra traps



atraORG

Pest: Rusty Tussock Moth - *Orgyia antiqua*

Host plants: Polyphagous, deciduous trees and shrubs

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps or Tetra traps



atraDISPAR

Pest: Gypsy Moth - *Lymantria dispar*

Host plants: Oak and other species of trees and shrubs

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Delta traps or White sticky boards dim. 30 x 40 cm



atraCAM

Pest: Horse-Chestnut Leaf Miner - *Cameraria ohridella*

Host plants: Horse-chestnut

Field activity: 4-6 Weeks

Application: Detection and Monitoring

Trap: Tetra traps or Delta traps

Traps and Adhesives



Ipids Barrier Trap

For detection and monitoring of Bark Beetles.

Material: Black polypropylene board (UV resistant)

Packing: 5 Pcs. / Box



Delta Trap

For detection and monitoring of forest moths.

Material: White polypropylene board with one sticky insertion

Packing: 2 Pcs. / Set



Tetra Trap

For detection and monitoring of forest moths.

Material: White polypropylene board with sticky bottom part

Packing: 2 Pcs. / Set



White Sticky Board

For detection and monitoring of nun moth and gypsy moth.

Material: White polypropylene board with one sticky side

Dimensions: 30 x 40 cm



Yellow Sticky Board

For detection and monitoring of Lesser Spruce Sawfly
Pristiphora abietina.

Material: Laminated yellow cardboard with both sides sticky

Dimensions: 21 x 29,7 cm (A4)



Adhesive

For the winter moth - *Operophtera brumata*, caterpillars, ants and aphids.

Material: contains polyisobutylene, non-toxic, water resistant

Packing: 2, 5, 10, 15 kg



Contact:

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