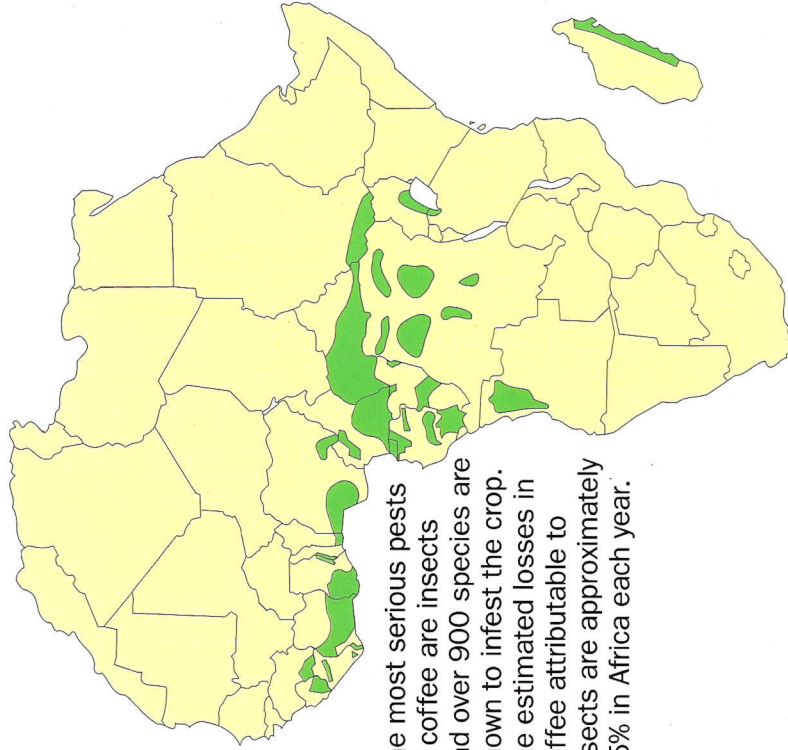




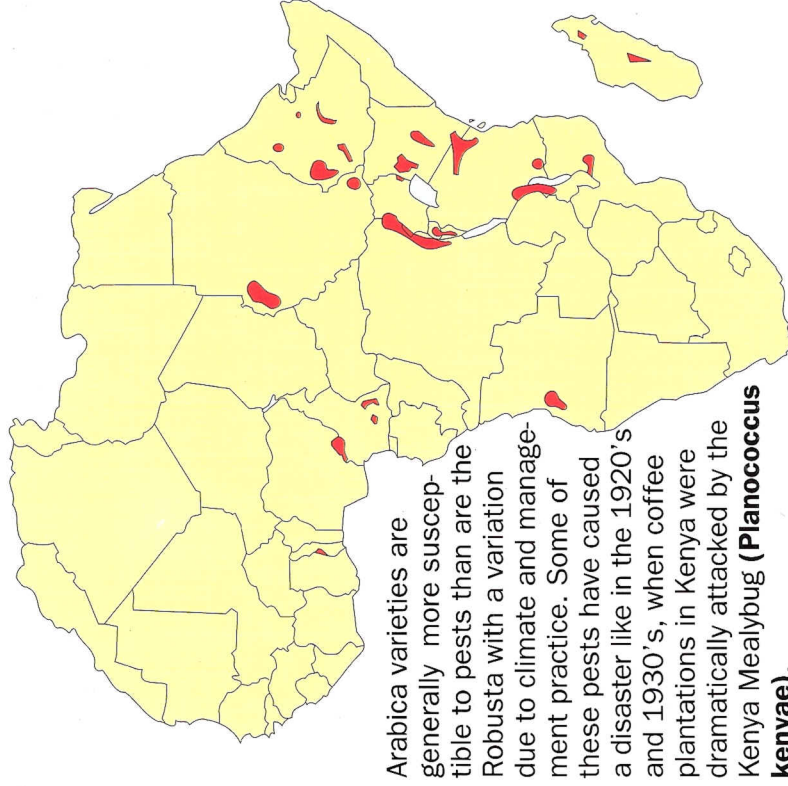
INSECTICIDE FOR THE CONTROL OF INSECTS ON COFFEE

INSECTICIDE FOR COFFEE TREES

ROBUSTA AREA



ARABICA AREA



INSECT PESTS ON COFFEE

Many insect pests affect Arabica and Robusta coffee trees with Arabica coffee being generally more susceptible to insect pests than Robusta.

Stem Borers make holes in the stems and woody branches of coffee trees. Ants make nests on leaves and are a nuisance for workers. Chewing and mining caterpillars and other pests like scales and bugs attack and infest stems, leaves, flower buds and berries.

DURSBAN 4 : TRIPLE ACTION

DURSBAN* 4, a wide spectrum organophosphorous insecticide, controls most of these insect pests of coffee and has the following modes of action :

VAPOUR	CONTACT	INGESTION
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DURSBAN 4 contains 480 g/l of Chlorpyrifos Ethyl.

DURSBAN 4: A WIDE SPECTRUM

FOLIAR APPLICATION

HYPOTHENEMUS HAMPEI

COFFEE BERRY BORER

dosage rate : **1 to 1.5 l/ha**
- 1st application when most of the berries have a diameter of 5 mm.
- 2nd application, three weeks later.



ANTESTIOPSIS SPP.

ANTESTIA BUG

dosage rate : **1 to 1.5 l/ha**
treat at :
- 2 adults or nymphs per tree in **dry area**.
- 1 adult or nymph per tree in **wet area**.



LEUCOPTERA SPP.

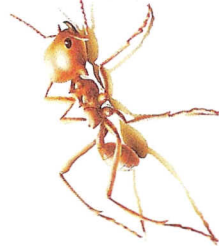
LEAFMINERS

dosage rate : **1.5 to 2 l/ha**
- 1st application before 20% of leaves show fresh mines or if 30 moths are found when the trees are shaken vigorously.
- 2nd application 2 weeks later.



ANTS

dosage rate : **1 l/ha**
Apply 14 days before picking.



ICERYA PATTERSONI

COTTONY SCALE

dosage rate : **125 ml/100 l of water**
Drench infested trees paying special attention to underside of leaves.

PROPHANTIS SMARAGDINA

BERRY MOTH

dosage rate : **1.5 l/ha**
- After the main flowering, if the buds of young berries are being eaten, spray immediately before the caterpillars bore, covering all sides of the berries.
- 2nd spray, five weeks later.



DIARTHROTHRIPS COFFEAE

THRIPS

dosage rate : **1 l/ha**
Treat at 1 to 2 thrips per leaf.

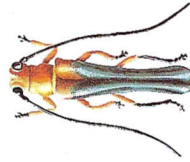


BARK BASAL TREATMENT

DIRPHYA NIGRICORNIS

YELLOW-HEADED BORER

dosage rate : **2 l/20 l of water**
- Enlarge the frass hole in the main stem and using a pen filler or oil can squirt the solution into the hole.
- Clear the ground under affected trees to check larvae not killed in the first round.
Repeat treatment if necessary.



APATE MONACHUS

BLACK BORER

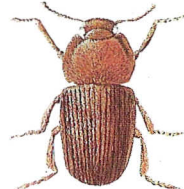
Push up a cotton wool dipped in DURSBAN 4 into the gallery.



GONOCEPHALUS SIMPLEX

DUSTY BROWN BEETLE

dosage rate : **1 l/20 l of water**
On young coffee plantations, spray 150 ml per tree around the base of stem.



ANTHORES LEUCONOTUS

WHITE BORER

dosage rate : **700 ml/20 l of water**
(plus 15 mg Methylene blue)
- Treat just before the onset of the rains.
- Repeat the treatment every year.



SYSTATES POLLINOSUS

SYSTATES WEEVIL

dosage rate : **15 ml/20 l of water**
Spray the mulch and base of stem preferably late in the evening.

GREEN SCALE - BROWN SCALE KENYA MEALYBUG - ANTS

dosage rate : **700 ml/20 l of water**
(plus 15 mg Methylene blue)
Treat the trunk with a band 50 to 90 cm from the ground level using a spray lance or a brush.

GASCARDIA BREVICAUDA

WHITE WAXY SCALE

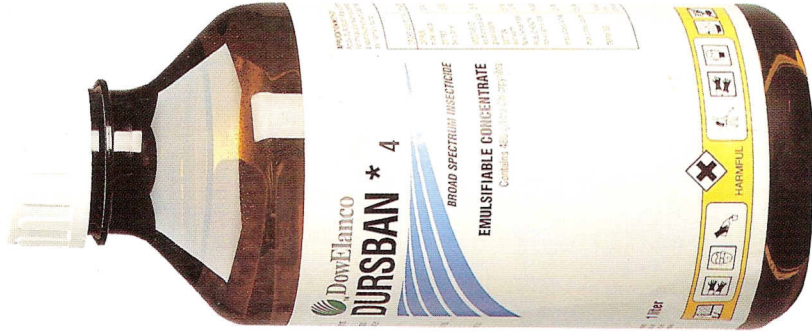
dosage rate : **750 ml/20 l of water**
(plus 15 mg Methylene blue)
Treat the trunk with a band 50 to 90 cm from the ground level using a spray lance or a brush.



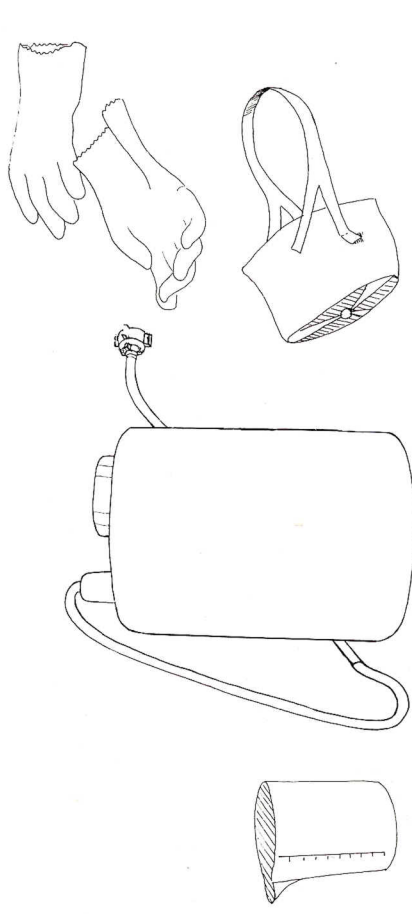


DURSBAN 4 : PRECAUTIONS FOR USE

- Read the label carefully.
- Do not eat, drink or smoke during application.
- Use gloves, avoid contact with skin and eyes, wash thoroughly with soap and water after application.
- Avoid breathing in the spray mist.
- Destroy empty containers, do not contaminate ponds, waterways or ditches with chemical or used containers.
- DURSBAN 4 contains a cholinesterase inhibitor. Atropine by injection only is an antidote.



SPRAYING EQUIPMENT



PREPARATION OF THE MIXTURE

