

03/97

Date of Issue: July 1997

GUIDELINES TO TEA GROWERS FOR THE MANAGEMENT OF SHOT-HOLE BORER

The key factors that determine the degree of Shot-hole Borer (SHB) infestation in tea fields are:

1. Altitude (regulates the ambient temperature and relative humidity which in turn influence SHB build-up)
2. Clonal tolerance or susceptibility
3. Wood maturity (months from prune)

Occurrence as a pest

SHB is important as a tea pest in the up country below 1500 m amsl, and in the mid country, Uva and the low country.

Clones

The following clones, found to be tolerant to SHB, may be grown as indicated below :

Up Country	Mid Country	Uva	Low Country
TRI 2023	TRI 2023	TRI 62/9	TRI 62/1
TRI 2027	TRI 2027	TRI 2023	TRI 2023
TRI 3018	TRI 3013	TRI 2027	TRI 2027
TRI 3019	TRI 3019	TRI 3013	TRI 3014
TRI 3069	TRI 3020	TRI 3018	TRI 3018
TRI 4053	TRI 3041	TRI 3019	TRI 3025
TRI 4085	TRI 3043	TRI 4046	TRI 3041
K 145	TRI 4001	TRI 4052	TRI 3043
N 2	TRI 4006	TRI 4056	TRI 3055
	TRI 4024	TRI 4067	TRI 4002
	TRI 4046	TRI 4070	TRI 4005
	TRI 4055	TRI 4071	TRI 4036
	TRI 4056		TRI 4042
	TRI 4070		TRI 4046
			TRI 4048
			TRI 4049
			TRI 4059
			TRI 4088
			TRI 4089
			DG 3
			DG 39
			EN 31
			H 1/58
			MT/BG (MT/18)
			NIL 12
			NIL 53
			NIL 211
			NIL 262
			NIL 274
			PO 37
			PO 26
			PW 39
			PW 55
			SJ 2

Note: Please contact the TRI for further information.

Chemical Control with Fenthion

(Which is marketed as 'Leybacid' 50% EC)

(i) Immature Tea

Fenthion should be sprayed on to the frame (not to the foliage) using knapsack sprayers, every year, at the onset of dry months (December/January in south-west sector and May/June in north-east sector), up to the first prune.

Use 3.5 l of fenthion in 750 l of water per hectare per application
(0.3 gallon of fenthion in 67 gallons of water per acre)

Tank mix- 4.7 ml of fenthion per litre of water
(0.75 fl.oz. of fenthion per gallon of water)

A repeat spray may be necessary, after six to eight weeks if SHB attack is noticed.

(ii) Mature Tea

Use 4.5 l of fenthion in 1000 l of water per hectare per application
(0.4 gallon of fenthion in 89 gallons of water per acre)

Tank mix - 4.5 ml of fenthion per litre of water
(0.72 fl.oz. of fenthion per gallon of water)

Fenthion application should be carried out as follows:

<i>Sector</i>	<i>Time of prune</i>	<i>Time of spray application</i>	<i>Repeat application</i>
South West	April/May	Following January (8-9 months after prune)	not necessary
South West	Sep/Oct	January of second year (15-16 months after prune)	not necessary
North East	March/April	May of next year (13-14 months after prune)	necessary (25-26 months after prune)
North East	Sep/Oct	May of second year (19-20 months)	not necessary

Wood rot and after-care

The primary or immediate damage caused by SHB is branch breakage. Galleries inside the stems lead to secondary or protracted damage in the form of wood rot and bush debilitation over successive pruning cycles.

It is essential to ensure that the frame remains healthy at all times and that no wood rot sets in. This could be achieved by removal of galleried stems, dead and rotted branches and snags until a clean cut surface is obtained. This operation should commence from the second prune and should be repeated at every subsequent prune. Use of a wound dressing as a protective measure is also necessary.

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