

Table 1. Dose rates and speed of action of different insecticides for which verified dose rates have been established for the Desert Locust. Speed of toxic action (see text) was defined as: F = fast (1-2 hours), M = moderate (3-48 hours) and S = slow (> 48 hours).

Insecticide	Class *	Dose (g a.i./ha)				Speed of action at verified dose rate	Primary mechanism
		overall (blanket) treatment		barrier treatment (hoppers)			
		hoppers	adults	within barrier	overall **		
bendiocarb	CA	100	100			F	AChE inhibition
chlorpyrifos	OP	225	225			M	AChE inhibition
deltamethrin	PY	12.5 §	12.5			F	Na channel blocking
diflubenzuron	BU	60	n.a. †	100	5	S	chitin synthesis inhibition
fenitrothion	OP	450	450			M	AChE inhibition
fipronil	PP	4	4	12.5	0.6	M	GABA receptor blocking
lambda-cyhalothrin †	PY	20 §	20			F	Na channel blocking
malathion	OP	925	925			M	AChE inhibition
<i>Metarhizium anisopliae</i> (IMI 330189)	fungus	100	100			S	mycosis
teflubenzuron	BU	30	n.a. †	n.d. §		S	chitin synthesis inhibition
triflumuron	BU	25	n.a. †	75	3.7	S	chitin synthesis inhibition

* BU: benzoylurea, CA: carbamate, OP: organophosphate, PY: pyrethroid, PP: phenyl pyrazole; ** calculated dose rate applied over the total protected area based on an average barrier width of 50 m and a track spacing of 1000 m (see § 17); § a higher rate may be required for the last instar; † n.a. = not applicable; § n.d. = not determined; ‡ where the "lambda" isomer is not registered in a country, cyhalothrin is applied at 40 g a.i./ha.

Source: Evaluation of field trials data on the efficacy and selectivity of insecticides on locusts and grasshoppers. Report to FAO by the Pesticide Referee Group, Eighth Meeting, Rome, 11 – 14 October 1999. FAO, Rome