

# New arsenal against POTATO TUBER MOTH

(Diedrich Visser, ARC-Roodeplaat)

During the past two years five new insecticides have been registered against the potato tuber moth on potatoes in South Africa. There are now no less than 20 insecticides available for tuber moth control. The five new insecticides fall in three groups, making the choice for farmers more easy regarding the alteration of different groups to prevent the build-up of resistance by the tuber moth.

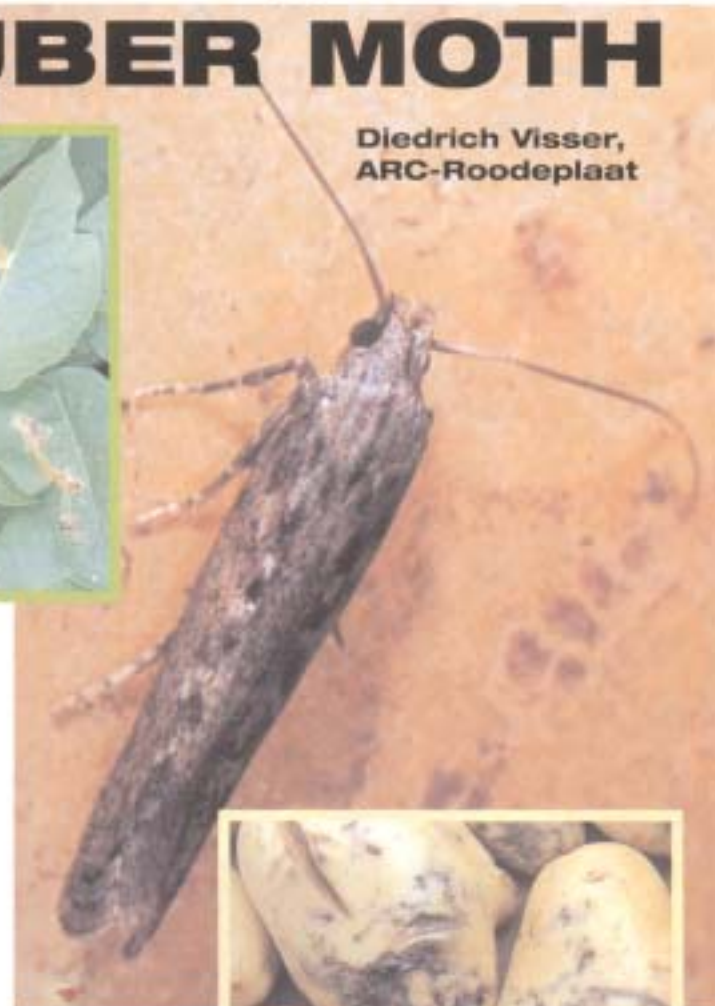
For more than ten years only three groups were available. They were the organophosphates, the pyrethroids and a carbamate. Two growth inhibitors, an oxadiazine, a pyrole and a new carbamate have been added to the old arsenal. The growth inhibitors are Sorba (Novartis) and Rimon (Makhteshim-Agan). The oxadiazine is Steward (du Pont) and the new carbamate is Suntap (Plaaschem).

The pyrole (also an effective miticide) is currently under development by Cyanamid and is only registered on potatoes in some parts of South Africa. All the mentioned insecticides have been registered this year (1999), except for Sorba which was registered in 1997. The old and new insecticides are included in the profile table.

The pyrole (Hunter) is not in the table since it has not yet been registered countrywide. The table lists the insecticides according to their groups and also indicate their activities and target pests which will be controlled by the relevant

insecticide. A simple spraying program can be compiled using the table. Always use systemic insecticides during the early parts of the season when the plants are still actively growing. Try not to follow-up with an insecticide in the same group (alternate between groups). Do not use pyrethroids when the ambient temperature is very high. Always use according to the label.

For more information and a copy of a complete table with insecticides against all potato pests, contact Diedrich Visser at ARC-Roodeplaat on (012) 841-9611.



Diedrich Visser,  
ARC-Roodeplaat



Pictures:  
The tuber  
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**Profile Table of Pesticides for control of Potato Tuber Moth on Potatoes SA.**

Common names (Commercial names)	Group	Activity	Target pests
Methamidophos [SL 585 g/l] (Metamidofos; Methaphos; Methamidophos; Midofos, Sniper Tamaron, Thamido, Thamafos; Rometa; Patrole)	Organophosphate	Syst-Cont	Tuber moth, aphids, cutworm
Acephate [SP 750g/kg] (Ace; Acephate; Orthene; Racet)	Organophosphate	Syst	Tuber moth, aphids
Azinphos-Methyl [WP 350g/kg; SC 350g/l&200g/l] (Codillifos' Azinphos-Methyl; Cotnion; Gusathio; Azinphos Flo)	Organophosphate	Cont	Tuber moth
Methidathion [WP 400g/kg; EC 420g/l] (Suprathiuon; Ultricide)	Organophosphate	Cont+Transl	Tuber moth
Monocrotophos [SL 400g/l] (Azodrin; Monocrotophos; Monostem; Nuvacron)	Organophosphate	Syst+Cont	Tuber moth, aphids, cutworm
Penthoate [EC 500g/l] (Elsan)	Organophosphate	Cnt+Stom	Tuber moth
Profenofos [EC 500g/l] (Cuyracron; Proton)	Organophosphate	Transl+Cont	Tuber moth; aphids
Alpha-Cypermethrin {EC or SC 100g/l} (Fastac; Concord)	Pyrethroid	Cont	Tuber moth
Bifenthrin [EC 100g/l; 18&O. 188g/Tab] (Talstar)	Pyrethroid	Cont	Tuber moth
Deltamethrin [EC 25g/l] (Decis)	Pyrethroid	Cont+Stom	Tuber moth
Esfenvalerate [EC 50g/l] (Sumicidin Super)	Pyrethroid	Cont+Stom	Tuber moth
Fenvalerate [EC200g/l] (Sumicidin; Agrovate; Fenvalerate; Sunvelarate)	Pyrethroid	Cont+Stom	Tuber moth, bollworm
Lambda-Cyhalothrin [EC 50g/l] (Karate)	Pyrethroid	Cont+Stom	Tuber moth, bollworm
Tralomethrin [EC 36g/l] (Sibling; Tralate)	Pyrethroid	Cont+Stom	Tuber moth
Cartap Hydrochloride [SP 500g/kg] (Suntap)	Carbamate	Sist+Stom+Cont	Tuber moth
Methomyl [SL 900g/kg; SP 200g/l] (Lannate; Kuik; Methosan; Methomyl; Methomex)	Carbamate	Cont+Stom	Tuber moth, bollworm
Lufenuron [EC 100g/l] (Sorba)	Growth Inhibitor	Stom	Tuber moth, bollworm
Novuluron [EC 100g/l] (Rimon)	Growth Inhibitor	Stom	Tuber moth, bollworm
Indoxacarb [300g/kg] (Steward)	Oxadiazine	Cont+Stom	Tuber moth, bollworm
Important The following is not registered as an insecticide, but as an attractant E,Z(+Z)-4,7 (+10)-tridecatrienyl acetate	Pheromone	Attractant	Tuber moth

*Syst = systemic; Cont = contact; Stom = stomach; Transl = translaminar*