



Recommendation Sheet No.20⁺
(March 1982)

INSECTICIDAL TREATMENTS FOR THE CONTROL OF POTATO PESTS

WARE POTATOES

AGAINST LEAF MINER

Tameron 60% w.s.c. 950-1425 ml/ha (400-600 ml/arp)
(or Ortho Monitor)

OR

Folimat 50% w.s.c. 1425 ml/ha (600 ml/arp)

OR

Decis 2.5% e.c. 500 ml/ha (210 ml/arp)

Tameron and Folimat, being systemic compounds, act mostly on the larvae in the leaves. Decis, being a contact insecticide, acts mostly on the adults.

Sprays should start when leaf mining has become evident and not before the plants are 5 weeks old.

Repeat application as necessary, but not within 15 days (Tameron and Folimat) or 7 days (Decis).

Tameron and Folimat should not be applied within 21 days of harvest. Decis may be applied up to harvest.

+ This Recommendation Sheet replaces No. 6 of January 1981

AGAINST LEAF-EATING CATERPILLARS

Lannate 90% s.p. 475 g/ha (200 g/arp)

OR

Decis 2.5% e.c. 500 ml/ha (210 ml/arp)

Tamaron and Folimat, as given above for leaf miner (Tamaron at the high dosage), will also control caterpillars but are less effective than Lannate and Decis.

AGAINST CUTWORMS

Cutworms are best controlled by baiting or by application of insecticide granules to the soil.

Locally-prepared bait

Formula :	Bran (maize)	10 kg
	Dipterex 80% s.p.	150 g
	Sugar (brown)	500 g (or molasses 1 kg)
	Water	10-14 litres

Dissolve the insecticide in 7-8 litres of water and add the sugar. Pour the solution gradually on the bran and stir so that the whole mass becomes damp. Stir in more water (3-4 litres) until water oozes out of the mixture when a handful is squeezed.

Apply the bait in the late afternoon in small heaps at the base of plants.

The quantities given above are enough to treat about 1/3 ha ($\frac{3}{4}$ -1 arp) of potatoes in pure stand.

Ready-made bait

Volaton 0.5% bait - 6 kg/ha ($2\frac{1}{2}$ kg/arp)

Apply the bait in small amounts at the base of plants and DO NOT cover with soil.

Insecticide granules

Basudin 10 g 15 kg/ha (6½ kg/arp)

Apply the granules along the rows close to the base of plants and lightly incorporate into the soil.

AGAINST RED SPIDER MITES

Folimat 50% w.s.c. 1425 ml/ha (600 ml/arp)

OR

Morocide 50% w.p. 950 g/ha (400 g/arp)

OR

Morestan 25% w.p. 950 g/ha (400 g/arp)

OR

Mitac 20% e.c. 1900 ml/ha (800 ml/arp)

OR

Peropal 25% w.p. 950 g/ha (400 g/arp)

OR

Akar 50% e.c. 1900 ml/ha (800 ml/arp)

Repeat spraying of Folimat after 14 days and of the other products after 7 days, if necessary.

Do not apply within 21 days (Folimat), 14 days (Morocide, Morestan, Peropal, Akar) or 7 days (Mitac) of harvest.

SEED POTATOES

Control of aphids is of the utmost importance in seed potato plantations to reduce spread of virus diseases. Preventive treatments for routine application are as follows :

At planting :

Furadan 10 G 21 kg/ha (9 kg/arp) in the furrows

At 4-5 weeks after planting and weekly thereafter :

Pirimor 50% s.g. 250 g/ha (105 g/arp)

OR

Croneton 50% e.c. 950 ml/ha (400 ml/arp)

Pirimor and Croneton, while excellent for control of aphids, are ineffective against other pests of potato.

If treatment against leaf-eating caterpillars is required, Lannate or Decis should be applied in combination with the above aphicides.

If treatment against leaf miner becomes necessary either apply Decis in combination with the aphicides OR apply Tamaron (or Folimat) and one of the recommended treatments against aphids in alternate weeks.

When, or if, it is considered unnecessary to treat further against leaf miner, the routine weekly application of an aphicide should recommence. It is not advocated to mix Tamaron and Folimat with the aphicides because (a) both products control aphids as well, although they are not so effective in this respect as the aphicides, and (b) weekly treatments against leaf miner is excessive when using Tamaron or Folimat.

Notes :

- (1) Whenever the term *arpent* is mentioned above, it refers to one arpent of potatoes planted in pure stand, i.e. 1600 gaulettes of potatoes.
- (2) The dosages recommended above must be adhered to irrespective of the application rate (volume of spray liquid applied per arpent) which will vary depending on the type of spraying equipment utilized. Thus, while the application rate when using mist blowers is of the order of 50 gallons/arpent, about 100 gallons will be required to cover the same acreage if ordinary knapsack sprayers are used.
- (3) All the insecticides and acaricides recommended above for spraying on potatoes are compatible with the fungicides currently used on potato.
- (4) s.p. = soluble powder; e.c. = emulsifiable concentrate
w.p. = wettable powder; w.s.c. = water soluble concentrate
s.g. = soluble grains.
- (5) The active ingredients of the insecticides and acaricides referred to above are as follows :

Tamaron	- <i>methamidophos</i>
Ortho Monitor	- <i>methamidophos</i>
Folimat	- <i>omethoate</i>
Lannate	- <i>methomyl</i>
Decis	- <i>decamethrin</i>
Dipterex	- <i>trichlorphon</i>
Furadan	- <i>carbofuran</i>
Volaton	- <i>phoxim</i>
Basudin	- <i>diazinon</i>
Morocide	- <i>binapacryl</i>
Morestan	- <i>quinomethionate</i>
Mitac	- <i>amitraz</i>
Peropal	- <i>azocyclotin</i>
Pirimor	- <i>pirimicarb</i>
Croneton	- <i>ethiofencarb</i>
