



ORGANIC SPRAY PROGRAMME

Drawn up by Wayne Gabb 082 552 4124

P/Bag X15, Suite 116
HERMANUS
7200
Tel 028 313 2054
biogrowchem@iafrica.com

TIMING	PRODUCT	DOSAGE	H ₂ O / Ha	COMMENTS
Planting	BIOMEX KELPACK	250m ℓ 1 ℓ / 100 ℓ	400 ℓ	Dip or drench root zone. Pythium, Fusarium, Scelerotonia.
1 st Application	B5 plus	250 mℓ / Ha (apply separately)		Spray or irrigate into soil. Eelworm Suppression.
3 – 4 Leaf stage	BIOTRISSOL COPPER SOAP	500 mℓ / 100 ℓ 1 ℓ / 100 ℓ	300 ℓ	Powdery, Downy Mildews, Anthracnose, Early Blight.
	BIONEEM plus VEGOL	400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water	300 ℓ 300 ℓ	Preventative: Leafminer, thrips, pumpkin fly, mites.
1 Week later	(WETTABLE SULPHUR) KUMULUS WG BIOTRISSOL	400 g / 100 ℓ water 500 mℓ / 100 ℓ water	300 ℓ 300 ℓ	Powdery Mildew, Rust mite. NPK 3.2.5 + Trace elements
1 Week later	COPPER SOAP BIONEEM plus VEGOL BT FLO	1 ℓ / 100 ℓ water 400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water 125 – 250 mℓ / Ha	500 ℓ 500 ℓ 500 ℓ 500 ℓ	Powdery, Downy Mildew, Blight Preventative: Leafminer, thrips, pumpkin fly. Bollworm, Plusia Looper & any Lepidopterous larvae. Eelworm suppression.
2 nd Application	B5 plus BIOTRISSOL	250 mℓ / Ha (apply separately) 1 ℓ / Ha		***Monitor insects. If worms are evident spray BT FLO , using half dose rate for low infestation.
1 week later	KOCIDE 2000 BIOTRISSOL <u>INSECTS: low infestation</u> BIONEEM plus VEGOL <u>Lepidopterous larvae</u> BT FLO <u>INSECTS: high infestation</u> PYROL	200 g / 100 ℓ water 500 mℓ / 100 ℓ water 400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water 125 – 250 mℓ / Ha 1 ℓ / 100 ℓ water	500 ℓ 500 ℓ 500 ℓ 500 ℓ 500 ℓ	Downy Mildew, Blight. Foliar Feed Preventative: Leafminer, thrips, pumpkin fly. Bollworm, Plusia Looper etc Leafminer, pumpkin fly, aphids
14 days later 3 rd application (Tunnels: 1 week later)	COPPER SOAP B5 plus BIOTRISSOL BIONEEM plus VEGOL	1 ℓ / 100 ℓ water 250 mℓ / Ha (apply separately) 1 ℓ / Ha 400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water	500 mℓ 500 ℓ 500 ℓ	***Fungal: Under dry conditions extend programme to 14-day intervals. (Open Field) ***Insects: Monitor weekly. Low infestations extend programme to 14-day intervals. Powdery, Downy Mildew, Botrytis. Eelworm suppression. Preventative: Leafminer, thrips, pumpkin fly.
14 days later (Tunnels: 1 week later)	KUMULUS WG BIOTRISSOL BIONEEM plus VEGOL <u>OR PYROL</u>	400 g / 100 ℓ water 500 mℓ / 100 ℓ water 400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water 1 ℓ / 100 ℓ water	500 ℓ 500 ℓ 500 ℓ	Powdery Mildew, Rust Mite Foliar Feed Preventative: Leafminer, thrips, pumpkin fly. Under high infestation periods.
14 days later (Tunnels: 1 week later)	CUEVA – Copper Soap BIONEEM plus VEGOL <u>OR PYROL</u>	1 ℓ / 100 ℓ water 400 mℓ / 100 ℓ water 200 mℓ / 100 ℓ water 1 ℓ / 100 ℓ water	750 ℓ	0 day Safety Period 1 day Safety Period 1 day Safety Period 1 day Safety Period

BIOMEX can be sprayed for botrytis as a foliar application. Dosage 25 mℓ / 100 ℓ water. Safety Period, 0 days.

SLUG & SNAIL CONTROL – USE FERRAMOL

Notes on SPRAY PROGRAMME

Through to end of harvest.

➔ **INSECT CONTROL:**

Check safety period and spray according to monitoring before and during harvest.

Preventative	BIONEEM	500 ml / 100 l water	0 days] Low insect infestation
	VEGOL	200 ml / 100 l water	0 days	
Remedial	BT FLO	250 ml / Ha	0 days	
	PYROL	1 l / 100 l water	1 day	
	NEUDOSAN	1.5 l / 100 l water	0 days	

Bioneem, Vegol, BT Flo and **Neudosan** are soft on beneficial insects. **Pyrol** is a broad-spectrum contact insecticide with low residual actions. **Neudosan** can be used effectively to control white fly / thrips. It is softer on your beneficial insects than Pyrol.

Actives:	Bioneem -	Neem Oil + Azadirachtin
	Vegol -	Canola Oil
	BT Flo -	Bacillus Thuringeinsis
	Pyrol -	Pyrethrum + Canola Oil
	Neudosan -	Potassium Salt of Fatty Acid

➔ **FUNGAL CONTROL:**

Under dry conditions alternate your fungal programme at 14-day intervals. Under wetter conditions decrease your spray interval according to infectious periods.

Kumulus S	400 g / 100 l water and
COPPER SOAP	500 ml / 100 l water.
Kocide 2000	200 g / 100 l water.

These are preventative products. **Copper Soap** will control anthracnose, Downey and powdery mildew and botrytis. Safety period 0 days. **Kocide 2000** will do the same, safety period 3 days.

Actives:	Kumulus –	Wettable granulated sulphur.
	Copper Soap -	Copper Octanoate (18g / l Cu)
	Kocide 2000 -	Copper Hydroxide (350g / l Cu)

Under wet and humid conditions Phyta can be used if approved by your certification body as it is SGS certified for use with motivation (e.g. Phytophthora and Pythium).

PHYTA	400 ml / 100 l water OR
-------	-------------------------

This is a preventative and remedial systemic product that will control downy and powdery mildew, botrytis, phytophthora and pythium.

➔ **FOLIAR FEEDING:**

BIOTRISSOL	500 ml / 100 l water	Fortnightly or as required.
------------	----------------------	-----------------------------

➔ **SLUG AND SNAIL CONTROL**

FERRAMOL	5 g / m ²	Long lasting, rain fast, safe pellets.
----------	----------------------	--

➔ **BIOMEX** Natural Fungi / Trichoderma strains. Stimulates roots and plants to grow with more vigour. Protects against soil borne diseases... Pythium, Fusarium, Rhizoctonia and Sclerotinia. Protects crops from Foliar Botrytis when spraying starts early in the season.

➔ **B5** Natural Bacteria / Bacillus strains. Controls the growth of certain harmful bacteria and fungi by competing with nutrients, and by directly colonising and attaching to fungal pathogens. Suppresses Eelworm egg development and produces enzymes for the breakdown of crop residues into usable formats by the plant.

➔ **FERTILIZATION PROGRAMME:**

At planting and preparation we suggest a soil analysis be done. Fertilization using the **TALBORNE RANGE OF VITA FERTILIZERS** can be done to rebuild the quality of soil. These products have the advantage of being available to the plant for up to 110 days in a slow release formulation.

Trace Elements – Biotrissol and Talborne Fertilizers contain microelements, however under severe deficiencies manifested by visual symptoms additional elements will have to be sprayed. Clarify the usage of Trace Elements with your Certification Body.

Note – If exporting, confirm products and safety periods with the market where produce is being sold.

Once you have gone through this programme I would like to discuss it with you.

WAYNE GABB

Cell 082 552 4124

OFFICE 028 313 2054