





# FRAC FUNGICIDE GROUP CODE 33

FIGHTER 500 SL is a systemic water soluble liquid fungicide for the control of *Phytophthora* root rot in avocado trees when applied as a stem injection.

## Active Ingredient

Potassium phosphite 777 g/ℓ Phosphorous acid equivalent 500 g/ℓ

**UN No.** 2834

Registered, Manufactured and Distributed by: Ag-Chem Africa (Pty) Ltd (Reg. No. 1998/013411/07) P.O.Box 589, Silverton, 0127, Gauteng, RSA. Tel: (012) 803-0145 • Fax: (012) 803-8418 www.agchem.co.za

	Content • Batch number • Manufacture date	
		113/08
		FIGHTER 500SL 01-2013/08
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Reg. No. L8677 Act No. 36 of 1947







CAUTION

#### WARNINGS:

- · Withholding periods:
  - Allow a minimum period of 30 days between last stem injection and harvest.
- Poisonous when swallowed.
- May cause skin and eye irritation.
- · Store in a cool, dry place away from food and feed.
- Keep out of reach of children, uninformed persons and animals.
- Apply FIGHTER 500 SL after spring and summer flushes have hardened off when applied as a stem injection.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the disease against the remedy concerned, as well as by the method, time and accuracy of application. The registration holder furthermore does not accept responsibility for damage to crops, vegetation, the environment, or harm to man or animal or for lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

#### PRECAUTIONS:

- · Wear rubber gloves and face shield whilst mixing and applying.
- In case of contact with the eyes, rinse immediately with plenty of running water and consult a medical practitioner.
- Do not eat, drink or smoke whilst mixing or applying, or before washing hands and face.
- Wash with soap and water after application or skin contamination.
- Change and wash your work clothes after application. Wash yourself.
- If you spill it on your clothes, change and wash them.
- Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse empty containers three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container.
- Destroy empty container by perforation and flattening and do not use for any other purpose.
- Prevent contamination of food, feed, drinking water and eating utensils.
- Any leftover FIGHTER 500 SL must be kept in a closed container in a safe place.

#### RESISTANCE WARNING:

For resistance management, **FIGHTER 500 SL** is a group code 33 fungicide. Any fungus population may contain individuals naturally resistant to **FIGHTER 500 SL** and other group code 33 fungicides. The resistant individuals can eventually dominate the fungus population if these fungicides are used repeatedly. These resistant fungi may not be controlled by **FIGHTER 500 SL** or any other group code 33 fungicide. To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same fungicide group code. Alternate with registered products from different fungicide group codes.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.

For specific information on resistance management contact the registration holder of this product.

### DIRECTIONS FOR USE: USE ONLY AS DIRECTED

#### Compatibility:

It is not recommended to mix  $\rm FIGHTER~500~SL$  with any other chemicals when applied as a stem injection.

#### STEM-INJECTION (Only avocado):

#### Timing of application:

Apply **FIGHTER 500 SL** after spring flushes have hardened off and repeat after hardening off of summer flushes. The exact date will be determined by the cultivar, prevailing weather conditions and region. Furthermore, trees affected by *Phytophthora* root rot will flush later, and therefore harden off later. Avoid injecting the trees while still flushing, because translocation to the roots will be reduced and might increase residues in the fruit.

#### Method of application:

Drill holes in the tree trunk using a 4.8 mm drill bit. Angle the holes downward and drill to a depth of 30 to 50 mm. The holes must be spaced evenly around the tree trunk. Use a standard "avocado" syringe to inject **FIGHTER 500 SL** into the freshly drilled holes.

Draw the required volume of FIGHTER 500 SL into the syringe. Invert the syringe and pull back the plunger to fill the remaining capacity of the syringe with air.

Insert the syringes carefully at the right angle into the holes in the tree trunk to ensure a tight fit and prevent leakage when pressure is applied. Do NOT ream the hole with the nozzle of the syringe. Depress the plunger to compress the air in the syringe, and then fix the plunger in this position with a suitable nail. The compressed air will help to force **FIGHTER 500 SL** into the tree. Repeat with all the holes that have been drilled. Remove the syringe only once the tree has taken up all the **FIGHTER 500 SL**. The absorption process of the **FIGHTER 500 SL** may take several minutes to a few days depending on the uptake ability of the tree and dosage rate per syringe.

The size and condition of the tree will determine the number of injections. The following table is a guideline to the number and volume of injections recommended per tree:

#### SEVERELY AFFECTED TREES (0.5 g ai/m<sup>2</sup>)

TREE DIAMETER (m)	NO. OF Syringes	FIGHTER 500 SL PER SYRINGE (m&)	WATER PER SYRINGE (m&)	TOTAL VOLUME PER SYRINGE (m&)	TOTAL FIGHTER 500 SL PER TREE (m&)
2	2	1.5	3.5	5	3
3	2	3.5	1.5	5	7
4	3	4	1	5	12
5	3	7	-	7	21
6	3	10	-	10	30
7	4	10	-	10	40
8	5	10	-	10	50
9	6	10	-	10	60
10	8	10	-	10	80
11	10	10	-	10	100
12	11	10	-	10	110
13	9	15	-	15	135
14	10	15	-	15	150

#### MILDLY AFFECTED TREES / PREVENTATIVE TREATMENT (0.3 g ai/m<sup>2</sup>)

TREE DIAMETER (m)	NO. OF Syringes	FIGHTER 500 SL PER SYRINGE (m&)	WATER PER SYRINGE (m&)	TOTAL VOLUME PER SYRINGE (m&)	TOTAL FIGHTER 500 SL / TREE (m@)
2	2	1	4	5	2
3	2	2.5	2.5	5	5
4	3	2.8	2.2	5	8.4
5	3	4.5	0.5	5	13.5
6	4	5	-	5	20
7	4	7	-	7	28
8	5	7	-	7	35
9	5	8	-	8	40
10	5	10	-	10	50
11	6	10	-	10	60
12	7	10	-	10	70
13	6	15	-	15	90
14	7	15	-	15	105

#### Notes:

- The addition of clean water to the lower recommended dosage rates for small trees will enable accurate dosing. However it is optional and not a requirement for dosing smaller trees and can be left out if preferred.
- Under the following conditions the above recommended rates might have to be adjusted:
  - Increase application rates for trees that are very tall in relation to their diameters (high tree populations or certain cultivars).
  - Lower application rates should be applied to trees with sparse foliage or which have been trimmed back severely.
- When adjusting the application rates, calculate the tree area (tree height x tree width
  or canopy diameter). Apply 1 m&/m<sup>2</sup> for severely affected trees and 0.7 m&/m<sup>2</sup> for
  mildly affected trees and/or preventative treatment.
- When using the adjusted rates, the number of syringes per tree will also have to be
  adjusted. It is important to find a balance between the volume FIGHTER 500 SL
  per syringe and the number of syringes per tree. Even though smaller amounts per
  syringe are absorbed quicker; more drill holes are required which cause more injury
  to the tree. However, fewer drill holes will cause less injury, but will take longer to be
  taken up by the tree.
- Observations made from field trials are that drill holes will heal within a few months after application.
- Due to boron deficiency normally associated with severely infected trees, the addition
  of a suitable boron nutrition source such as BORON 130 SC is strongly recommended
  until the trees return to normal productivity.
- Some leaf damage might occur due to FIGHTER 500 SL injections, especially on trees with sparse foliage. However, subsequent flushes of new growth will be normal in most cases.
- Temporary leaf burn of Pinkerton, Ryan and Fuerte cultivars may occur in some areas under certain circumstances. The dilution of the FIGHTER 500 SL dosage rate with an equal amount of water will decrease the possibility of leaf burn.
- Should there be any uncertainty regarding the application of FIGHTER 500 SL, contact an Ag-Chem Africa (Pty) Ltd representative.

BORON 130 SC Reg. No. B3718, Act No. 36 of 1947 Ag-Chem Africa (Pty) Ltd.