

sonar

Phos PK



soil



foliar

Plant defense inductor



COMPOSITION

%w/w

Potassium Phosphonate	95,0
Phosphorus (P ₂ O ₅)	57,0
Potassium (K ₂ O)	38,0

Characteristics

SONAR PHOS PK is a greater activator of the natural defense of the plant against certain pathogenic fungi and bacteria.

It stimulates the production of Phytoalexins, which enhance the host's natural defences against *Oomyces* fungi: *Phytophthora* spp., *Plasmopara viticola*, *Bremia*, *Pseudoperonospora*, *Peronospora*, *Pythium* and also bacteriae: *Pseudomonas* and *Erwinia*.

It is specially recommended to prevent diseases caused by these pathogens, such as:

- Water spot and brown rot in citrus fruits.
- Foot rot and trunk-branch canker (Gummosis) in avocados, citrus, top fruits and ornamental trees.
- Fire blight in top fruits.
- Downy mildew in table and vine grapes, lettuces and onions.
- Blight of pepper.
- Root rot and downy mildew in: Strawberries, tomatoes, cucurbits, vegetables and ornamentals.
- Brown blight of conifer fences.
- Damping-off in turf and lawns.

Doses and Application

Crop	Application	Doses/treatment	Spray volume	Remarks
CITRUS AVOCADO TOP FRUITS	Foliar spray (H.V.)	250 g/hl	1.000 - 3.000 l/ha	Three (3) preventive treatments per season are recommended: in the beginning of Spring, Summer and beginning of Autumn. In top fruits, treat once or twice in pre-blossom or/and petal fall, to prevent Fire blight.
	Foliar spray (mistblower)	600 g/hl	300 - 1.200 l/ha	
	Trunk painting	300 g/l	-	Scratch the infected part of the stem and paint the affected area. In case of high pressure of the disease, make three (3) treatments per season.
	Soil (through drip irrigation)	5 - 7 kg/ha	-	Make 2 preventive treatments: 1st in spring; 2nd in autumn.
STRAWBERRIES	Soil (through drip irrigation)	2,5 - 5 kg/ha	-	Make 2 - 3 treatments from rooting to flowering to prevent attacks of <i>Phytophthora cactorum</i> .
	Foliar spray	250 g/hl	800 - 1.000 l/ha	From the start of flowering to end of harvesting, make 3 - 4 treatments.
VINEYARD	Foliar spray (mistblower)	500 g/hl	300 - 500 l/ha	Treat every 15 days from flowering to ripening. A tank mix with preventive fungicides as Folpet or Mancozed are recommended.
TABLE GRAPES	Foliar spray	250 g/hl	600 - 1.000 l/ha	
LETTUCE and leaf crops	Foliar spray	2,5 Kg/ha	600 - 1.000 l/ha	Two (2) treatments are recommended: 1st: 7-10 days after transplanting. 2nd: 15 days later.
ONIONS	Foliar spray	1,5 - 2,5 Kg/ha	300 - 500 l/ha	Three (3): preventive treatments per season are recommended: 1st: three (3) true leaves stage. 2nd: 15 days later. 3rd: 15-21 days later.
FENCES OF CONIFERS	Foliar spray	250 g/hl	600 / 1.000 l/ha	Make 4 treatments every month from Spring to mid Summer.
	Soil (drip irrigation or drenching)	10 g/m of fence	-	•Use up to 20-30 g in case of isolated big trees (soil drenching).
TOMATOES/ CUCURBITS	Foliar spray	150 - 250 g/hl	800 - 1.000 l/ha	To prevent attacks of <i>Phytophthora infestans</i> / <i>Pseudoperonospora cubensis</i> fortnightly (15 days) from flowering until mid-end harvesting. A tank mix with Aliado is recommended to also control <i>Alternaria</i> .
PEPPERS	Soil (through drip irrigation or drenching)	2.5 Kg/ha	-	To prevent <i>Phytophthora capsici</i> attacks, treat every 15-21 days from one week after transplanting to harvesting. A tank mix with Hymexazol is recommended to also control <i>Pythium</i> .
TURF & GOLF COURSES	Foliar or sprinkler irrigation	0,75 - 1 Kg/1000m ²	-	Monthly treatments from beginning of Spring to mid Autumn are recommended. To control also <i>Helminthosporium</i> and <i>Rhizoctonia</i> treat (in tank mix) with Chlorothalonil and



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