

TRIANUM-P®
MAPP No. 16741

Contains: 1 % w/w *Trichoderma harzianum* Rifai strain T-22 spores (1 x 10⁹ spores/g) and 99 % w/w inert ingredients
Water Dispersible Granule (WG)

Trianium-P® is a biofungicide for the reduction of soil-borne *Pythium*, *Rhizoctonia* and *Fusarium* in protected edible and ornamental crops. It can be applied via drench application to the growing medium, or through drip-irrigation systems, or by spraying at sowing.

IMPORTANT INFORMATION				
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL FUNGICIDE				
User: Professional				
Crop/situation	Maximum Individual dose:	Maximum total dose:	Maximum number of treatments:	Last time of application:
Cucumber (protected), pepper and chilli (protected), tomato (protected), and aubergine (protected)	15 kg product/ha at propagation And 15 g/1000 plants at cultivation after propagation	-	2 per crop at propagation (see Other Specific Restriction 1) 12 per year (see Other Specific Restriction 2)	-
Ornamental plant production (protected)	15 kg product/ha at propagation And 15 g/1000 plants at cultivation after propagation	-	2 per crop at propagation (see Other Specific Restriction 1) 4 per crop (see Other Specific Restriction 2)	-
Lettuce (protected) and baby leaf crops (protected)	15 kg product/ha	-	1 per crop	-
Other Specific Restrictions: <ol style="list-style-type: none"> 1) Minimum interval of 14 days at propagation 2) Minimum interval of 4 weeks at cultivation 3) Treatment must only be made under 'permanent protection' situations which provide full enclosure (including continuous top and side barriers down to below ground level) and which are present and maintained over a number of years 4) Reasonable precautions must be taken to prevent access of birds, wild mammals and honey bees to treated crops 5) To minimize airborne environmental exposure, vents, doors and other openings must be closed during and after application until the applied product has fully settled 				
Product to be applied at temperatures above 10° C only				
READ ALL OTHER SAFETY PRECAUTIONS AND DIRECTIONS FOR USE BEFORE USE				

SAFETY PRECAUTIONS

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS

KEEP OUT OF THE REACH OF CHILDREN

THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY

KEEP ONLY IN THE ORIGINAL CONTAINER

WASH HANDS AND EXPOSED SKIN before meals and after work

DO NOT BREATHE DUST

AVOID CONTACT WITH EYES

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT* when handling or applying the product.

*Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent

Micro-organisms may have the potential to provoke sensitising reactions

Operator Protection:

1. Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

Operators must wear suitable protective clothing (coveralls), suitable protective gloves and suitable respiratory protective equipment* when handling the product or applying the product.

*Disposable filtering facepiece respirator to at least EN149 FFP3 or equivalent.

2. However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

To avoid risks to man and the environment, comply with the instructions for use.

DIRECTIONS FOR USE

GENERAL INFORMATION

Trianum-P® protects plants against infection by soil-borne pathogens via the root system. This can enhance the growth and development of roots and aerial parts of the plant. Trianum-P® can be used under various environmental conditions. It grows under a range of temperatures above 10°C (maximum temperature 34°C), at a pH between 4-8, in many types of growing media, and on the roots of a wide range of plants.

PREPARATION OF SUSPENSION

Suspend the required dose of Trianum-P® in water, as 1 volume of Trianum-P® in 5 volumes of water.

Mix thoroughly.

Add suspension to required amount of water to obtain final drench volume (see below).

Agitate continuously to maintain an even distribution of Trianum-P® spores, as they can precipitate out.

Apply the suspension on the day of preparation.

APPLICATION AND DOSE

Trianum-P® should be used preventatively. For the best results, always use Trianum-P® from propagation onwards, before occurrence of disease.

Use sufficient suspension to guarantee good penetration of the growing medium, but to maximise spore attachment to the plant roots, avoid run-off and excessive drainage for the first two days following application.

Do not use disinfectants in drip irrigation systems for at least one day before and two days after the application of Trianum-P®. Introduce Trianum-P® into the irrigation system AFTER the filter(s).

Trianum-P® is not a systemic product and is therefore not taken up by the roots.

Propagation fruit vegetables and ornamentals

Apply 1.5 g/m² of cultivated area, suspended in 2.5-5 litres of water, immediately after sowing seeds, or sticking cuttings.

Propagation of lettuce (under permanent protection with full enclosure)

Apply 1.5 g/m² of cultivated area, suspended in 1.5 - 2 litres of water, immediately after sowing.

Cultivation after propagation

Apply 15 g/1000 plants directly after planting.

Use a volume of water equivalent to 10% of the substrate volume, or 100 litres/1000 plants.

Repeat the dose every 10 weeks, or after potting-on.

Disease reduction

The beneficial fungus *Trichoderma harzianum* T-22 out-competes plant pathogenic fungi for space and nutrients, colonising the plant roots ahead of the pathogens. It also has some activity as a mycoparasite by producing enzymes which break down the hyphae of the plant pathogenic fungi.

No PHI (minimum pre-harvest interval) is needed between treatment with Trianum-P® and harvest.

COMPATIBILITY

Trianum-P® should not be applied in mixture with other pesticides or liquid fertilisers. The effect of other pesticides applied either before or after Trianum-P® on its effectiveness has not been fully established. Some pesticides, particularly fungicides, may reduce effectiveness of Trianum-P®.

It is compatible with natural enemies and can be used in integrated crop management systems.

Trianum-P® has been used on a wide range of crops under a wide range of conditions and no phytotoxicity has been observed.

Application equipment should be cleaned thoroughly after use.

Consult processor before using on crops intended for processing.

STORAGE

Trianium-P® is a biological product and has a guaranteed shelf-life of six months at 4°C. The product should be stored at 4 – 8°C and used within six months of the date of manufacture.

Do not keep in domestic refrigerators

Do not freeze

Manufactured for: Koppert UK Ltd, 8 Tudor Rose Court, 53 Hollands Road, Haverhill, Suffolk, CB9 8PJ
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BATCH No: see packaging

USE BY: see packaging

NET CONTENT: 500 g

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Approval holder and marketing company: KOPPERT BV, Veilingweg 14, 2651 BE Berkel en Rodenrijs, The Netherlands.

www.koppert.com

COMPANY ADVISORY INFORMATION

This section is not part of the (EC) 1107/2009 Regulation.

KOPPERT BV guarantees that TRIANUM-P® is fit for the purpose and conforms to the specifications stated on this label. KOPPERT BV gives no warranty, express or implied, including the warranties of commercially acceptable quality and/or fitness for any particular purpose concerning this material, other than those which are stated on this label, and will not be liable for any direct or indirect damage which results from incorrect use of the product or non-compliance with the directions of this label.