

**NUTREL/SIC**

**DOCUMENT M-CP, Section 3**

**DATA ON APPLICATION**

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**Version history<sup>1</sup>**

<b>Date</b>	<b>Data points containing amendments or additions and brief description</b>	<b>Document identifier and version number</b>

<sup>1</sup> It is suggested that applicants adopt a similar approach to showing revisions and version history as outlined in SANCO/10180/2013 Chapter 4 How to revise an Assessment Report

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## **CP 3 DATA ON APPLICATION**

### **CP 3.1 Field of Use Envisaged**

The hydrolysed protein is used as: a) a foliar spray in mixture with an insecticide, applied on some trees or some branches of trees in orchards and olive groves and b) as a bait for trapping of flies.

The NUTREL formulation product is used in agriculture as an attractant of Diptera in fruit trees (olives, pomme trees, stone trees, citrus, fig and walnut), kiwi and blueberries, in mixture with conventional insecticide/s.

### **CP 3.2 Effects on Harmful Organisms**

The hydrolysed protein has a contact and residual action. The mode of action is by attracting Diptera harmful to fruit species. The flies, before laying their eggs need to feed on protein substances and hence are attracted by hydrolysed proteins. The control of harmful organisms depends on the mode of action of the insecticide used in the mixture.

The mode of action is the attracting properties of hydrolysed protein towards the flies (Diptera) harmful to the fruit species. The flies, before laying the eggs need to feed on protein; hence they are attracted by the hydrolysed proteins.

### CP 3.3 Details of Intended Use

#### DETAILS OF INTENDED USES AND CONDITIONS OF USE (GAP INFORMATION – IT – January 2018)

**Tradename:** NUTREL

**Active Ingredient:** Hydrolysed proteins 30% (= 378 g/L)

(a)	Member State or Country	Product name	F, G, or I (b)	Pests or Group of pests controlled (c)	Formulation		Application				Application rate per treatment			PHI (days) (l)	Remarks: (m)
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage (j)	number min max (k)	interval between applications (min)	kg as/hL max	water L/ha min max	kg as/ha max		
<i>Olea europaea</i> L. (olive) <i>Malus pumila</i> Mill., <i>Pyrus communis</i> L. (Pome fruits) <i>Prunus</i> spp., <i>Persica vulgaris</i> Mill., (stone fruits) <i>Juglans regia</i> L. (walnut) <i>Citrus</i> spp (citrus) Fig, Actinidia and Blueberries	Italy, Spain, Greece, Portugal, France	NUTREL	F	Adult insects (Diptera) laying eggs on fruits	SL (n)	378 g/l	Normal volume spraying, / high pressure	7 (o)	2 - 4	10 - 30	-	100-200	0.907	(p)	( 2.4 L product/ ha)
				Mass trapping			Product in Traps	Development of fruits	N.A.	N.A.	90 Traps/Ha	N.A.	8,5	N.A.	( 22.5 L product/ ha).

**Remarks:** (a) For crops, the EU and Codex classifications (both) should be used; where relevant, the situation should be described (e.g. fumigation of a structure)  
 (b) Outdoor or field use (F), glasshouse application (G) or indoor application (I)  
 (c) e.g. biting and sucking insects, soil born insects, foliar fungi, weeds  
 (d) e.g. wettable powder (WP), emulsifiable concentrate (EC), granule (GR)  
 (e) GCPF Codes - GIFAP Technical Monograph No 2, 1989  
 (f) All abbreviations used must be explained  
 (g) Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench  
 (h) Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plant- type of equipment used must be indicated

(i) g/kg or g/l  
 (j) Growth stage at last treatment (BBCH Monograph, Growth stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4); including where relevant, information on season at the time of application  
 (k) Indicate the minimum and maximum number of application possible under practical conditions of use  
 (l) PHI - minimum pre-harvest interval  
 (m) Remarks may include: Extent of use / economic importance / restrictions  
 (n) Soluble Liquid (Water solution)  
 (o) Development of fruits, the growth stage depends on the authorized insecticide utilized in mixture  
 (p) Not required for the active substance itself. Refer to the authorized insecticide utilized in mixture

### CP 3.4 Application Rate and Concentration of Active Substance

The maximum application rate of NUTREL (378 g/L Hydrolysed proteins) is 1.2 L f.p./hl, equivalent to 2.4 L f.p./ha and 907 g Hydrolysed proteins/ha, with 200 l water/ha corresponding to olive trees, pome fruits, stone fruits, citrus, walnut, fig, kiwi and blueberries.

For full details please refer to GAP table (CP 3.3).

### CP 3.5 Method of Application

The product is recommended for application after dilution in water by partial foliar spraying, in the field by tractor mounted spraying devices or by Knapsack sprayer.

The water volumes ranges from 100 to 200 L/ha depending of the use pattern and crop.

For mass-trapping the Nutrel is used as it is in bottle-trap.

For full details of all uses please refer to GAP table (CP 3.3)

### CP 3.6 Number and Timings of Applications and Duration of Protection

Maximum number of applications and their timings:

The hydrolysed protein is used in agriculture as an attractant to insects. It can be used in mixtures with insecticides, in sprays. It can also be used in mass trapping, attracting insects to the trap and retaining them until they die.

When applied in mixtures with insecticides, insects are attracted by the protein and are eventually killed by the insecticide effect. In the case of mass trapping, insects are attracted to a trap from which they cannot escape.

The number of applications and their consequent distribution will be determined by the kind of insecticide that has been mixed with the formulated product NUTREL.

Is used in spot bait sprays to prevent the oviposition of olive fly and Mediterranean fruit fly and the extensive damage to crops.

The maximum number of applications and their timing are presented in the following table.

Crop	Number of Applications (max)	Interval between applications (days)	Growth stage BBCH
Olive trees	4	10-30 days	7*
Pome fruits	4	10-30 days	7*
Stone fruits	4	10-30 days	7*
Walnut	4	10-30 days	7*
Citrus spp.	4	10-30 days	7*

Fig	4	10-30 days	7*
Kiwi Fruit	4	10-30 days	7*
Blueberries	4	10-30 days	7*

\* *Development of fruits, the growth stage depends on the authorized insecticide utilized in mixture*

Growth stages of crops or plants to be protected:

Principal growth stage 7: Fruit development (BBCH 71-79)

For full details of all uses please refer to GAP table (CP 3.3).

Development stages of the harmful organism concerned:

The timing of the first application is aiming at destroying the adults of previous year and preventing oviposition in the earliest fruits is of particular importance.

Nutrel is a insect attractant and therefore the spray program must start before fruit fly enters the crop.

Duration of protection afforded by each application:

The duration of protection by the applications is between \0 to 30 days. The obtained effect remains until harvest.

Duration of protection afforded by the maximum number of applications:

The total number of applications of NUTREL according to the GAP table is expected to afford season long protection for these crops. Until harvest.

### **CP 3.7 Necessary Waiting Periods or Other Precautions to Avoid Phytotoxic Effects on Succeeding Crops**

Minimum waiting periods or other precautions between last application and sowing or planting succeeding crops:

In accordance with the EFSA Journal 2012;10(2): 2545 [41 pp.], Conclusion on the peer review of the pesticide risk assessment of the active substance hydrolysed proteins, no particular restriction related to rotational crops is needed.

Waiting periods to avoid phytotoxic effects on succeeding crops: do not need to be established. Due to the mode of action, no effects on succeeding crops are to be expected.

Besides, the product has no herbicidal effect. Thus, every succeeding crop can be sown or planted immediately after spraying.

Thus, no waiting period is required between the last application of NUTREL and the sowing or planting the succeeding crops. Not applicable for orchards since these are perennial and therefore under normal practice there is no succeeding crop.

#### Limitations on choice of succeeding crops:

There is no limitations on choice of succeeding crops after application of NUTREL. No information is available which would indicate the necessity of limitations.

Not relevant, the product is applied to orchards, this crop is not grown in rotation (see above).

### **CP 3.8 Proposed Instructions for Use**

Treatments from the ground: use NUTREL at the concentration of 1.2%, in mixture with the insecticide at the rate usually recommended. Treat only a limited and well exposed to sun crown area, on alternate rows. Repeat the treatment in case of rain.

Preferably use air blasts at normal and high pressure to obtain a perfect atomization of the insecticide mixture. Spray 100-200 liters of water per hectare, depending on used equipment, orchard dimension and training system. Maximum rate: 2,4 L NUTREL/ha, equal to 907 g a.s./Ha.

Use insecticides with a persistence at least equal to the one of NUTREL (e.g.: formulations based on deltamethrin, lambda-cyhalothrin).

To ensure the success of the control, it is necessary to apply 2-3 treatments, with an interval of 10-30 days.

For a more precise application point out the appearance of the adults using adequate trap bottles.

Mass trapping: on average, place per hectare 90 traps with adequate lateral holes, containing 250 ml of NUTREL. Place the traps 1.5 m-high, on branches facing south, avoiding direct sunlight. Refill in case of evaporation of the attractive liquid. Maximum rate: 22.5 L NUTREL/ha, equal to 8.5 kg of a.s./ha.

#### **COMPATIBILITY**

NUTREL has to be mixed with insecticides complying with the precautionary statements recommended for the product used in mixture.

In case of mixture with other formulations, respect the longer pre-harvest interval. Comply with the precautionary statements recommended for the most toxic products. In case of intoxication, inform the doctor on the mixture done.

Interrupt the treatment according to the directions for use recommended for the insecticides used in mixture.

Use exclusively for the uses and under the conditions reported in this label. Do not apply with aerial equipment; do not contaminate other crops, food and beverage or watercourses. Do not operate upwind.