GENERAL INFORMATION

1. Product name: Reno
2. Responsible for marketing: Agritalia di Guandalini Erio
3. Product application: Microbial insecticide
4. Active substance (in accordante with ISO, IUPAC, N CAS): Spore-crystal complex of Bacillus Thuringiensis var. Thuringiensis, Exotoxin
5. Chemical class of active substance: Microbial agent.
6. Active substance concentration (g/l or g/kg): biological activity > 1500.0 units/mg – Exotoxin content 0-6-1.0%

INFORMATION ON ASSESSMENT OF THE BIOLOGICAL EFFECTIVENESS, SAFETY AND PRODUCT PROPERTIES

1. Action spectrum
   Product is pathogenic for most pest insect species of the following orders: Lepidoptera, Homoptera, Hymenoptera, Heteroptera, dipterai, Tetranichoidea (spider mites), Coleoptera (beetles).

2. Application range

   2.1 Cultures
   Vegetables (tomato, aubergine, pepper, cabbage, carrot, sugar beet, table beet, fodder beet, alfalfa, sunflower, potato, cucumber, etc.), berries (currant, raspberry, black chokeberry, gooseberry, strawberry, etc.), fruits (apple tree, plum tree, apricot tree, mulberry tree, sweet cherry tree, pear tree, sour cherry tree, grape, brier, bird cherry tree, etc.), woody and ornamental plants, alfa, hops, herbs (clary, yellow horned poppy, kenaf, horse gowan, fennel, marigold, valerian, toothpickweed, strawflower, diffuse wallflower, field restharrow, rhubarb, nightshade, rosa damascena), woods (oak, birch and other types of deciduous trees).

   2.2 Harmful organisms (with Latin names)
   Ordinary spider mite (Tetranychus telarius or T. urticae), potato beetle (Leptinotarsa decemlineata), hop aphid (Phorodon humuli), cabbage and turnip butterfly (Pieris brassicae, P. rapae), pyralid moth (Pyraloidea): cabbage webworm (Piones forficalis), carrot moth (Eurycreon palealis), field MOTH (Eurycreon sticticalis L), gooseberry fruitworm (Zophodia convolutella), European corn borer (Ostrinia (Pyrausta) nubilalis), beet webworm (Loxostege (Pyrausta) sticticalis), blackvein (Aporia crataegi L), brown tail moth (Euproctis chrysorrhoea L.), fall webworm (Hyphantria cunea Drury), Apple Ermine Moth (Yponomeuta malinellus Zell.), fruit moth (Yponomeuta padellus L), diamond-back moth (Plutella xylostella L. or P. maculipennis Curt.), potato moth (Phthorimaea opercula), leaf-roller moth (Torticidae): oak red-barred twist (Cacoecia crataegana Hb.), (Exapate congeiatella Cl.), Hedya nubiferana (Haw.), Dark oblique-barred twist (Pandemis heparana...
Den. et Schiff.,) variegated golden tortricid (Cacoecia xylosteana L.), Ancylis achatana Den. et Schiff., common rough-winged button (Acleris variegana Den. et Schiff.), (Ptycholoma lecheana L), oak-feeding tortricid (Ptycholoma lecheana L), summer fruit tortricid (Adoxophyes orana F. R.), pea-green oak twist (Tortrix viridana L.), currant leafroller (Pandemis ribeana Hbn.), grape berry moth (Lobeisa botrana Den. et Schiff.), etc., codling moth (Cydia (Laspeyresia) pomonella L.); gooseberry sawfly (Pterodinae ribesii), cherry slug (Caliora cerasi), boundary moths (Geometridae): wister moth (Operoptheria brumata L.), (Eupithecia insigniata Hbn.), great winter moth (Erannis defoliaria C.1.), (Erannis (Hybernia) aurantia Hb.), brindled beauty moth (Biston hirtaria C1), common magpie moth (Abraxas grossulariata), bordered white beauty (Bupalus (Fidonia) pinarius L.), pine moth (Boarmia bistortata Goeze) , noctuid moths (Noctuidae): cabbage moth (Manestra brassicae L.), The Turnip Moth (Agrotis segetum Schiff.), Silver Y Moth (Autographa gamma L.), Scarce Bordered Straw (Heliothis peltigera), Marbled clover (Heliothis viriplaca L.), Durnal Sallow (Pyrrhia umbra), bollworm (Heliothis (Helicoverpa) armigera Hbn.), cotton leafworm (Spodoptera (Laphygna) exiqua), cosmopolate (Vanessa (Pyrameis) cardui L.), lackey (Malacosoma Neustria L.), gypsy moth (Ocneria (Lyantria) dispa L.), pine moth (Dendrolimus pini L.), black currant leaf midge (Dasyneura tetensi); beet carriion beetle (Aclypea opaca); leaf beetle (Chrysomelidae), alfalfa plant bug (Adolphocoris lineolatus);

3. Recommended application schedule
   3.1 Treatment terms
      3.1.3 Developmental stages of a harmful organism
   3.2 Treatment frequency
   3.3 Time interval between treatments

4. Recommended rate and method of application

5. Recommended expectation period (number of days to harvest)
   Detailed information (section 3, 4, 5) is presented in the table of product application schedule.

6. The way of impact on harmful organisms
   Reno is a stomach insecticide. The spore-crystal complex and β-exotoxin of Reno constitute its active properties. Sporulation and crystal formation of Bacillus Thuringiensis are simultaneous processes. Parasporal crystal endotoxin forms simultaneously with spore at the opposite pole of Bacillus (the spore-crystal complex). Endotoxin is a protein compound identical to the chemical structure of spore coat protein. (It comprises glycoprotein units. Carbohydrate fraction contains glucose and mannose). Endotoxin crystals are very temperature sensitive. Crystal protein transfer into solution in a strong alkaline medium. The toxic components of crystal release in lepidopterous insects’ intestine that have high pH level. With the help of insects’ enzymes crystal protoxin is transformed into active natural toxin that damages the mucous membrane of larva’s mesenteron. The osmotic balance in mesenteron epithelial cells is broken, as the result cells are damaged and intestine contents run into the body cavity of insect. At the beginning, during 1-4 hours, toxin results in general paralysis of digestive system. Speros, when moving from intestine to body cavity, will germinate and multiply during 12-24 hours and cause larval death. Thermostable exotoxin (β-exotoxin) enhances the impact spectrum of Reno and allows to apply it not only against lepidopterous insects, but also against larvae of dipteran, coleopterous, hymenopteran and orthopterous insects. Exotoxin accumulates in culture fluid (outside the cell of microorganism), its formation coincides with bacterial culture development. Elementary structure:C_{22}H_{32}N_{19}P_{19}H_{2}O. Molecular weight of β-exotoxin in acid state 701D. Exotoxin is nonprotein compound that belongs to the class of adenine nucleotides with abnormal sugar component. The effect of exotoxin is determined by inhibition of nucleotidases and DNA-dependent RNA-polymerase linked with ATP, as the result RNA synthesis ceases that causes anomalies development and decrease of insects’ reproductive function (teratogenic effect). Exotoxin effects more slowly than endotoxin, besides older caterpillars are more acquisitive to it in comparison with younger ones, that can be explained by its impact on germinating cells during metamorphosis. Thus the effect of exotoxin should be regarded as chronic. Exotoxin, together with spores and crystals of endotoxin, acts as synergist: after destroying intestine wall exotoxin quickly penetrates into hemolymph and insect’s organs causing physiological changes and death.

7. Protection period
   Protection period depends on weather conditions, air temperature and lasts over 20 days.

8. Selectivity
   The difference in receptivity of various insect species towards the effect of endotoxin crystal is connected with specificity of intestinal protease controlling hydrolysis of crystals. Not all the insects have such proteases, that explains selectivity of the effect. Exotoxin has smaller selectivity. Entomophages don’t feed on treated plants.
9. Impact speed
Caterpillar stops feeding already during the first day after treating. They begin to die in 2-3 days, this period lasts during 15-20 days.

10. Compatibility with the other agents
It is not recommended to use Reno simultaneously with the other pesticides. In case of large population and adult caterpillars you may use it together with contact insecticide in accordance with defined requirements.

11. Biological effectiveness
When treating plants against various pests, biological effectiveness may vary within range 60-100%, it depends on plenty of factors: weather conditions, treatment terms, etc.

12. Phytotoxicity, tolerance of protected cultures
The product is not phytotoxic, it doesn’t accumulate in plants, doesn’t influence on their taste or smell. It may be used at any stage of plant vegetation period. Entomopathogenic microorganisms don’t bring harm to the plants since they are natural biocenosis members.

13. Probability of resistance display
Resistance wasn’t observed.

14. Possibility of culture variations in crop succession
Limits are not established.

15. Product effect on useful entomofauna of protected agrocenosis
Reno may be met everywhere. Active ingredient quickly builds in natural biotic and abiotic cycles and is not expected to bring harmful impact on useful entomofauna.

C. MICROBIAL AGENTS

INFORMATION ON COMPOSITION AND PROPERTIES OF ACTIVE INGREDIENT AD PREPARTIION METHOD (OF BACTERIAL, FUNGAL, VIRAL AGENTS BASED ON MICROORGANISM VITAL ACTIVITY)

Producer strain properties

1. Specific name of microorganism (Latin name)
Bacillus Thuringiensis var. Thuringiensis

2. Number or name of strain isolator
98-1C strain

3. Source of strain generation
From natural sources (from dead chrysalis of cabbage moth) using clone selection.

4. Culture-structural and biochemical characteristics, tests and identification criteria (note company fulfilled the identification)
Gram-positive active bacilli, peritrichs, vegetative cells are binate or collected into small chains. Cell size of one-day old culture on agar-meat infusion (AMI) is 1.3-1.5x2.6-3.2 micrometers (µm). By 3-4 day of accretion, oval spores 8 (size 0.8-1.0x1.2-1.4 µm) and regularly diamond shaped parasporal inclusions (size 1.1x1.3 µm) are formed on AMI. In 118 hours of growth by 30°C temperature the culture produces round shaped colonies with irregular edge and close-grained surface (diameter 4-5 mm) on the AMI. By 24 hours of growth when the temperature is 28°-30°C, suspension is moderately turbid, when left to stand there is a white precipitate. Gelatin is liquefied, starch is hydrolyzed. On Clark’s medium acetylmethylcarbinol is formed. Salicin, saccharose, cellobiose is fermented with acid appearance in 48 hours. Phospholipase is developed on the yolk media. No pigmentation.
5. Pathogenicity or antagonism towards harmful object
98-1C strain is pathogenic for most insect species of order Lepidoptera, Homoptera, Hymenoptera, Hemiptera, Diptera, Colorado beetle, Tetranichoidea.

6. Product synthesized by strain (chemical composition, structural formula, stability, method of residue detection)
Culture-producer forms spores, thermodabile protein delta-endotoxin and thermostable β-exotoxin.
In accordance with List of Maximum Allowable Levels of Pesticide Content in Food Products and the Methods of its Detection (State Sanitary-Epidemiological Institute of Ministry of Health care USSR, date of approval 28/0/.83, # 2823-83) residual quantity of bacterial agents in products is not subject to regulation.
Delta-endotoxin is a protein with molecular weight 130-140 kD, insoluble in water and organic solvents, but soluble in alkaline solutions. Delta endotoxin is not thermostable and it denatures when temperature 70°C. Protein endotoxin and thermostable edotoxin are rapidly metabolized by native soil microflora.
β-exotoxin is 2-0 (4'-0-5-L-dideoxyadenosine-5'-yl-ξ-D-glucopyranosyl)-4-0-phospho-D-alar acid.

![Chemical structure of endotoxin]

R= -PO(OH)

The residual quantity of biopesticide is estimated by exotoxin content in agricultural products by the means of thin-layer chromatography; Level of quantification: 20 µm of exotoxin in 500 g of sample.

General information on preparation

1. Product composition: concentration of active ingredient (titres of living cells or their waste products, virus and inclusion titres), auxiliary substances and their function
   Spore-crystal complex (active ingredient) < 9%
   Exotoxin (active ingredient) 0.6-1.0%
   Nutrient medium residue 60%
   NaCl (spore stabilizer and phlegmatizer by drying) 13%
   Lignosulphonate (filler) up to 100%

2. Aggregative state: Powder
3. Wettability: Wettability during 210-240 sec
4. Moisture content: Mass fraction of moisture in prepared product <7.0%
5. Extraneous microflora content: Product doesn’t comprise pathogenic microorganisms.
6. Method of active ingredient detection: Method of biological potency detection (i.e. activity of spore-crystal complex) is based on determination of Reno concentration, causing 50% death of test-objects in comparison with control sample. Exotoxin activity is defined by the method of high performance liquid chromatography. Endotoxin is not detected separately from spore-crystal complex.
7. Storage terms and conditions
   Storage: in warehouses for pesticides, in hermetically sealed containers, temperature range: - 30°C +30°C.
   Storage warranty period of Reno: 1.5 years
8. **Method of working liquid preparation**

   Any methods and ratio are suitable when product diluted with water accordingly to application recommendations. The product is used as water suspension. Required amount of the product is solved with small amount of water in a special tank, stirred thoroughly and loaded into the container of sprayer. You may add some water and stir the solution thoroughly. When spraying, solution should be regularly stirred. Prepared solution must be used up within 1 day.

9. **Compatibility with the other pesticides and agrichemicals**

   It is recommended not to combine Reno with the other pesticides. In case of large population and adult caterpillars you may use it together with contact insecticide in accordance with defined requirements.

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D. **TOXICOLOGICAL ASSESSMENT OF MICROBIOLOGICAL AGENT PREPARATIVE FORM**

1. **Acute peroral toxicity (mice, rats):** \( LD_{50} \)

   - \( LD_{50} \) – for mice, rats > 10000 mg/kg
   - \( LD_{50} \) – for mice, rats > 10375 ± 1520 mg/kg
   - \( LD_{50} \) – for mice, rats - 6000 mg/kg
     - for mice - 6000 mg/kg for mice
     - \( LD_{50} \) – for mice, rats - 9000 mg/kg

2. **Acute inhalation toxicity:** \( LC_{50} \)

   Since the agent doesn't cause animal death, \( LC_{50} \) for white outbred rats (in case of single endotracheal injection) exceeds the maximum tested and technically achievable concentration (6146 mg/m³).

3. **Irritating and resorptive effects on skin and mucous membrane (when required)**

   Experiments for defining the irritating effect on skin are conducted on cavies and rabbits. In case of a single application of the agent on skin, no irritation is observed. Experiments for defining the Reno irritating effect on eye mucous membranes are conducted on rabbits. Low irritating effect of Reno on eye mucous membranes is established.

4. **Sensitizing action**

   During 1 month 50% suspension of prepared product was applied to the animals' skin. Experiment revealed no allergenic properties of the product.

   Guinea pigs and white mice were injected with Reno under the skin or into peritoneum according to the scheme. Active anaphylaxis was performed through intravenous or intracardiac allergen injections, skin hypersensibility was detected with the help of endermic tests. Reaction of mast cell degranulation (Shelley's indirect test) was fulfilled. Total sensitizing doses showed 3x10⁶ – 4x10⁹ microbial cells per animal. Immunological status of animals was studied before the test and in 4-5 weeks after first allergen injection. Guinea pigs in 33-100% of cases had positive skin tests and reaction of mast cell degranulation only if using vegetative forms of Reno, vegetatives cells are medium allergens. Spore agents didn't reveal allegen action. Reno doesn't comprise vegetative cells.

5. **Cumulative properties (for the agents based on the products of microorganisms life activity)**

   Experiments for detecting Reno cumulative properties were fulfilled on white rats.

   Cumulative factor for Reno: 2.4.

6. **Dysbacteriotoxic action**

   Not established

7. **Composition and contamination of microflora (for virus and microsporodial agents) and information on pathogenicity (for hematothermal organisms)**

   Not required, since Reno is not virus or microsporodial agent. Reno producer strain is not pathogenic for hematothermal organisms.

8. **Long-term effects (for toxin-containing products):**

   During experiments fulfilled in VNIIGINTOX, laboratory of blastomogenic, mutagenic and embryotoxic properties of chemical substances, long-term effects of toxin-containing product Reno are not detected.
ECOLOGICAL AND TOXICOLOGICAL ASSESSMENT

1. **Toxicity to bees**
   According to contract and oral toxicity characteristic Reno is considered to be practically nonhazardous to bees.
   \[ \text{LD}_{50} \text{ (contact toxicity)}: 116.2 \pm 1.4 \text{ microgram/bee} \]
   \[ \text{LD}_{50} \text{ (oral toxicity)}: 102.6 \pm 1.2 \text{ microgram/bee} \]

2. **Toxicity to fish and other water organisms**
   \[ \text{LC}_{50} \text{ Daphnia magna (24 hour exposition)}: 52.3 \text{ mg/l}, \]
   Reno at concentration up to 5.0 mg/l doesn’t demonstrate significant effect on main vital functions (survival rate, growth, fertility) of Daphnia magnas.
   Inactive concentration to carp (30 days exposition): 10.0 mg/l.
   MAC of Reno for water of fishing industry water sources: 5.0 mg/l

3. **Toxicity to birds**
   Bacillus Thuringiensis culture and agent are practically nontoxic to mammals, birds.

4. **Toxicity to earthworms and soil microorganisms**
   Bacillus thuringiensis culture and agent components are practically nontoxic to earthworms and to no effect on soil microorganisms. They are quickly decomposed as the result of microbiological activity and are utilized by soil microflora.

5. **Toxicity to other non-target organisms**
   The product is nontoxic and in case of applying in required ranges, is safe for human, hematothermal organisms, fish, hydrocoles, bees and entomophages. It is toxic to silkworm and processionary moth, it should be taken into consideration when using in the zone of insect breeding.

6. **Persistance in environment**
   Culture-producer is received from nature objects and, being a component of natural ecosystem, it doesn’t accumulate in the soil or water, easily biodegrades, doesn’t cause harmful effect on natural purification processes. After 20days from the treatment moment, it is washed out from plants and only single spores are displayed.
   Since Bacillus Thuringiensis var. Thuringiensis culture and the product on its basis are not volatile, air pollution will not take place.
## APPLICAZIONE
### IN AGRICOLTURA

<table>
<thead>
<tr>
<th>Coltura (gruppo di colture)</th>
<th>Parassita</th>
<th>Dosaggio prodotto kg/ha</th>
<th>Dosaggio minima quantità acqua l/ha</th>
<th>Applicazione periodo di trattamento restrizioni</th>
<th>Frequenza trattamenti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cavolo cappuccio e altri ortaggi</td>
<td>Nottua del cavolo (fase larvale 1-2)</td>
<td>2</td>
<td>400-500</td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</td>
<td>1-3</td>
</tr>
<tr>
<td>Patata, pomodoro, melanzana, peperone</td>
<td>Dorifora della patata</td>
<td>2-2,5</td>
<td>400</td>
<td>Applicare in caso di presenza di un gran numero di larve, contro qualsiasi formazione di infestante a intervalli di 6-8 giorni</td>
<td>2-3</td>
</tr>
<tr>
<td>Melo, susina, albicocco, gelso, pero, ciliegio</td>
<td>Mosca della frutta, biancospino, farfalla del biancospino, caduta della piralide (fase larvale 1-3), sigaraio, baco da seta, tarma fogliare, bombice dal ventre bruno (fase larvale 1-3)</td>
<td>2-3</td>
<td>3-5</td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</td>
<td>1-2</td>
</tr>
<tr>
<td>Cetriolo in serra</td>
<td>Ragnetto</td>
<td>21-30</td>
<td>Soluzione 0,7-1%</td>
<td>Varie applicazioni durante il periodo vegetativo a intervalli di 15-17 giorni</td>
<td>-</td>
</tr>
<tr>
<td>Barbabietola da zucchero, bieta, barbabietola da foraggio, erba medica, girasole, carota, cavolo</td>
<td>Piralide della barbabietola (fase larvale 1-3)</td>
<td>2</td>
<td>300-400</td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</td>
<td>1-2</td>
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<tr>
<td>Barbabietola da zucchero</td>
<td>Sifilide opaca della barbabietola (acyplea opaca)</td>
<td>2</td>
<td>300-400</td>
<td>Applicare in caso di presenza di larve &gt;2/m², contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</td>
<td>1-2</td>
</tr>
<tr>
<td>Vite</td>
<td>Lobesia botrana Den. et Schiff.</td>
<td>6-8</td>
<td>100</td>
<td>Applicare in 8-10 giorni dopo che le farfalle abbiano cominciato a volare, contro qualsiasi formazione di infestante a intervalli di 5-7 giorni</td>
<td>1-2</td>
</tr>
<tr>
<td>Ribes, arbusto dell’uva spina</td>
<td>Sigaraio, geometra del ribes, abrassa dell’uva spina (fase larvale 1-3), tentredine gialla dell’uva spina, moscerino, ragnetto</td>
<td>5</td>
<td>400-500</td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni. Ulteriori trattamenti contro acari a intervalli di 15-17 giorni.</td>
<td>1-2</td>
</tr>
<tr>
<td>Erba medica (semina)</td>
<td>Baco dell’erba medica (fase larvale 3-4)</td>
<td>2,5-3</td>
<td>200-400</td>
<td>Applicare durante il periodo di fioritura, a intervalli di 10 giorni</td>
<td>1-2</td>
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<td></td>
<td>Agrotide -verme grigio- (fase larve giovane), (tarma fogliare, bruco della fase giovane)</td>
<td>5</td>
<td>200-400</td>
<td>Applicare durante il periodo vegetativo</td>
<td></td>
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<tr>
<td>Luppolo</td>
<td>Afide del luppolo</td>
<td>2-4</td>
<td>200-400</td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 8 giorni</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Coleotteri foglia (falena Nottuidi o owlet), piralide dell’erba medica (fase larvale 1-2)</td>
<td>2-3</td>
<td></td>
<td>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Moscatella/scl area</th>
<th>Nottua, nottua dei siminati/delle messi, the Silver Y (fase larvale 1-2)</th>
<th>2</th>
<th>400-600</th>
<th>Applicare durante il periodo vegetativo contro qualsiasi formazione di infestante a intervalli di 7-8 giorni</th>
<th>1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toothpickweed (Ammi visnaga)</td>
<td>Piralide della barbabietola</td>
<td>2-3</td>
<td>400-600</td>
<td>Applicare durante il periodo vegetativo</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prodotti immagazzinati</th>
<th>Parassiti/insetti da stoccaggio</th>
<th>0,006/m²</th>
<th>0,2 l/m²</th>
<th>Trattamento umido. Accesso del personale dopo 24 ore dal trattamento</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moscatella/scl area</td>
<td>Nottua, nottua dei siminati/delle messi, the Silver Y (fase larvale 1-2)</td>
<td></td>
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<td></td>
<td>toothpickweed (Ammi visnaga)</td>
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<tr>
<td>Papavero delle spiagge/papavero cornuto/papavero delle dune (Glaucium)</td>
<td>Entomoscelis suturalis Wse (fase larvale 1-2)</td>
<td>2-3</td>
<td>400-600</td>
<td>Applicare durante il periodo vegetativo</td>
<td>1</td>
</tr>
<tr>
<td>Sandy everlasting Riccioli d’oro/fiore eterno</td>
<td>Piralide della barbabietola dell’erba medica (fase larvale 1-2) cosmopolite (fase larvale 1-4)</td>
<td>2-3</td>
<td>400-600</td>
<td>Applicare con una soluzione madre pari a 0,5-0,7 %, a un intervallo di 10-15 giorni, alternare a trattamenti di insetticidi chimici</td>
<td>2-3</td>
</tr>
<tr>
<td>Rosa e altri fiori in serra</td>
<td>Ragnetto</td>
<td>10-30</td>
<td>2000-4000 l/ha</td>
<td>Applicare durante il periodo di espansione fogliare</td>
<td>1</td>
</tr>
<tr>
<td>Essenza Rosa /oli essenziali da rosa</td>
<td>Geometra falena, sigaraio (fase larvale 1-2)</td>
<td>3</td>
<td>600-800</td>
<td>Applicare durante il periodo vegetativo</td>
<td>1</td>
</tr>
<tr>
<td>Kenaf</td>
<td>Nottua dei seminativi, verme del cotone (fase larvale 1-2)</td>
<td>3</td>
<td>400-600</td>
<td>Applicare durante il periodo vegetativo</td>
<td>1-2</td>
</tr>
<tr>
<td>Violaciocca diffusa</td>
<td>Tignola del cavolo, rapa</td>
<td>3</td>
<td>400-600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piante officinali, calendula, finocchio</td>
<td>Piralide dell’erba medica (fase larvale 1-3)</td>
<td>3</td>
<td>400-600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campo Restharrow -arvensis- (spring r. ononide-bulinaca-arrestabue)</td>
<td>Bordered Sallowm (Pyrrhia umbra), trifoglio marmorizzato (fase larvale 1-3)</td>
<td>3</td>
<td>400-600</td>
<td>Applicare durante la 1^ e la 2^ fase di foglie vere</td>
<td>2</td>
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<td>Rabarbaro Cinese, Mela (Solanum aviculare)</td>
<td>Agrotide/verme grigio (fase larvale 1-3)</td>
<td>3</td>
<td>400-600</td>
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<tr>
<td>Tarasco cavallo camomilla</td>
<td>Piralide dell’erba medica (fase larvale 1-3)</td>
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<td>400-600</td>
<td>Applicare durante il periodo vegetativo</td>
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<td>Rosa Canina</td>
<td>Sigaraio (fase larvale 1-3)</td>
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<td>600-800</td>
<td>Applicare durante la fase di germogliamento</td>
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<tr>
<td>Quercia</td>
<td>bombice dal ventre bruno (fase larvale 1-3), falena invernale e sfogliatrice degli alberi da frutto/falena sfogliatrice (fase larvale 1-2)</td>
<td>2 (A)</td>
<td>20-25 (a basso volume)</td>
<td>Applicare sia nell’aria che nel terreno durante il periodo vegetativo</td>
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<tr>
<td>Quercia</td>
<td>Bombice dispari (fase larvale 1-2)</td>
<td>2-2,5 (A)</td>
<td>20-25 (a basso volume)</td>
<td>Applicare sia nell’aria che nel terreno durante il periodo vegetativo</td>
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<td>Betulla</td>
<td>Bombice dispari, lepidotteri estivi e autunnali (fase larvale 1-2)</td>
<td>2-2,5 (A)</td>
<td>20-25 (a basso volume)</td>
<td>Applicare sia nell’aria che nel terreno durante il periodo vegetativo</td>
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