



# **Crop Production**

At Andermatt, we believe effective, sustainable agriculture starts with reliable biological solutions. Our portfolio represents one of the most comprehensive ranges in the industry, allowing us to provide integrated solutions tailored to different crops, climates, and grower needs.

What sets Andermatt apart is not only the diversity of our products, but the depth of expertise behind them. Each solution is developed and manufactured within our specialist subsidiaries, where decades of scientific research, rigorous quality standards, and continuous innovation ensure consistent performance. These capabilities are further strengthened through strategic collaborations with research institutes and partner companies worldwide, enabling us to bring new technologies to market quickly and effectively.

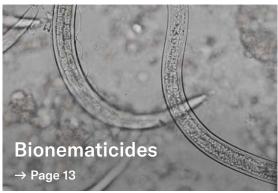


**Dr. Brendon Neumann**Director Product Portfolio
Andermatt Group

#### **Crop production**





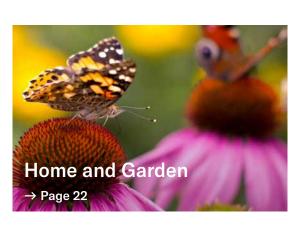








#### **Home and Garden**



**Bee Health** 



## **Bioinsecticides**

Andermatt is proud to be world leaders in baculovirus based bioinsecticides.



"At Andermatt, we recognize baculoviruses as an effective and reliable tool for lepidopteran pest control. Their specific mode of action, coupled with their natural occurrence, ensures safety for beneficial insects and other non-target organisms."

<u>Dr. Heidi Widmer,</u> <u>Global Product Manager</u> Andermatt Biocontrol Suisse



Anna Landwehr,
Global Product Manager
Andermatt Biocontrol Suisse



<u>Dr. Deborah Kaiser,</u> <u>Global Product Manager</u> Andermatt Biocontrol Suisse



Maël Wüthrich, Global Product Manager Andermatt Biocontrol Suisse



Sam Haley, Global Product Manager Andermatt Canada



Helicoverpa armigera, Larva feeding on green bean

	Against	Contains	Crops	Concentration	Certifications	Manufacturer
Capex® Plus	Summer fruit tortrix (Adoxophyes orana)	Adoxophyes orana granulovirus (AdorGV) and Adoxophyes orana nucleopolyhedrovirus (AdorNPV)	Apple, pear, rose, plum, cherry, apricot, peach, currant, tea and others	1.5×10 <sup>13</sup> OB/I AdorGV and 4.2×10 <sup>11</sup> OB/I AdorNPV		Andermatt Biocontrol Suisse
Cryptex®	False codling moth (Thaumatotibia leucotreta, formerly: Cryptophlebia leucotreta)	Cryptophlebia leucotreta granulovirus (CrleGV)	Citrus, avocado, pomegranate, bean, cotton, grape, macadamia, ornamen- tals, corn, pepper, stone fruit, tea and others	2×10 <sup>13</sup> OB/I	EU organic (Ecocert), NOP (Ecocert)	Andermatt Biocontrol Suisse
Helicovex®, Bolldex®, Verpavex®	Cotton bollworm (Helicoverpa armigera), corn earworm (Helicoverpa zea) and other Helicoverpa species	Helicoverpa armigera nucleopolyhedrovirus (HearNPV)	Soybean, sorghum, corn, cotton, tomato, lettuce, green beans and others	7.5×10 <sup>12</sup> OB/I	NOP (OMRI), Demeter international, EU organic (FiBL list)	Andermatt Biocontrol Suisse
LdMNPV	Spongy moth, Gypsy moth (Lymantira dispar)	Lymantria dispar nucleopolyhedrovirus (LdMNPV)	Forests, woodlands, residential areas	2.8×10 <sup>7</sup> OB/ml	COS (Ecocert)	Andermatt Canada
Littovir®	African cotton leafworm (Spodoptera littoralis), Fall armyworm (S. frugi- perda) and other Spodoptera species	Spodoptera littoralis nucleopolyhedrovirus (SpliNPV)	virus and soybean, vegeta- Demeter bles and others international, EU		, ,,	Andermatt Biocontrol Suisse
Loopex <sup>®</sup>	Cabbage looper (Trichoplusia ni), Rachiplusia nu, Alfalfa worm (Auto- grapha californica)	Autographa californica nucleopolyhedrovirus (AcMNPV)	Brassicaceae crops, also tomato, lettuce, pea, potato and others	5×10 <sup>11</sup> OB/I	COS (Ecocert)	Andermatt Canada
Loopovir®	Soybean looper (Chrysodeixis includens)	Chrysodeixis includens nucleopolyhedrovirus (ChinNPV)		5×10 <sup>11</sup> OB/I		Andermatt Canada
Madex® Top, Plus, Primo, Max	Codling moth (Cydia pomonella)	Cydia pomonella granulovirus (CpGV)	Apple, pear, walnut and others	3×10 <sup>13</sup> OB/I	NOP (OMRI), Demeter international, EU Organic (FiBL list)	Andermatt Biocontrol Suisse
Madex® Twin, Duo	Oriental fruit moth and codling moth (Grapholita molesta, Cydia pomonella)	Cydia pomonella granulovirus (CpGV)	Peach, nectarine, apple, pear, apricot, almond, cherry, plum and walnut	3×10 <sup>13</sup> OB/I	NOP (OMRI), Demeter international, EU Organic (FiBL list)	Andermatt Biocontrol Suisse
Plutex®	Diamondback moth (Plutella xylostella)	Plutella xylostella granulovirus (PlxyGV)	Brassicaceae eg. cabbage, broccoli and canola	2.5×10 <sup>13</sup> OB/I	NOP (OMRI)	Andermatt Biocontrol Suisse
Spexit®	Beet armyworm (Spodoptera exigua)	Spodoptera exigua multicapsid nucleo- polyhedrovirus (SeMNPV)	Vegetables and others	3.75×10 <sup>12</sup> OB/I	NOP (OMRI), Demeter international, EU organic (FiBL list)	Andermatt Biocontrol Suisse
Spodovir® Plus	Fall armyworm (Spodoptera frugiperda)	Spodoptera frugiperda multicapsid mononu- cleopolyhedrovirus (SfMNPV)	Corn, sorghum, rice, soybean	5×10 <sup>11</sup> OB/I	NOP (OMRI)	Andermatt Canada
Tutavir <sup>®</sup>	Tomato leafminer (Tuta absoluta) and potato tuber moth (Phthorimaea operculella)	Phthorimaea operculella granulo- virus (PhopGV)	Tomato, potato and other solanaceous crops	2×10 <sup>11</sup> OB/I	Demeter international, EU organic (FiBL list)	Andermatt Biocontrol Suisse
Virosoft® CP4	Oriental fruit moth and codling moth (Grapholita molesta, Cydia pomonella)	Cydia pomonella granulovirus (CpGV)	Peach, nectarine, apple, pear, apricot, almond, cherry, plum and walnut	4×10 <sup>13</sup> OB/quart	NOP (OMRI), COS (Ecocert), Demeter international	Andermatt Biocontrol Suisse

Formulation: Suspension concentrate Shelf-life and storage: 2 years <  $5\,^{\circ}$ C, > 2 years at < -18  $^{\circ}$ C Stability: pH 5 –  $8.5\,^{\circ}$ C

Pack sizes: 50 ml, 100 ml, 200 ml, 500 ml, 1 L, 5 L, 10 L, 20 L Raw material option: Yes Restrictions: None

# **Fungal Bioinsecticides**



"Fungus-based insecticides are bioinsecticides derived from beneficial fungi that target agricultural pests, helping to reduce crop damage."

Bruce Roestof,
Global Product Manager
Andermatt PHP

	Against	Contains	Crops	Concentration	Certifications	Manufacturer
Bb-Protec®, Eco-Bb®, Bassidor®, Beauvisan®	Multiple pests including red spider mite, whitefly, mealybug, thrips and others	Insect-pathogenic fungus Beauveria bassiana strain R444	Multiple crops incl. orchard crops, vegetables and cereals	1×10 <sup>8</sup> CFU/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP
Nomu-Protec®	Lepidopteran pests, especially those belonging to the Noctuidea family	Insect pathogenic fungus Metarhizium rileyi strain PHP1705	Wide range of crops	1×10 <sup>8</sup> CFU/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP

Formulation: Wettable powder Shelf life and storage: 2 years, refrigerate (4–10 °C) for maximum shelf life. Application type: Foliar spray or soil drench

Pack sizes: 50 g, 300 g, 1 kg, 5 kg Raw material option: Bb-Protec only Restrictions: Not tankmix compatible with certain fungicide products, Compatibility lists available.



Green stinkbug (Nezara viridula) infected with Bb-Protec®

## Mineral Bioinsecticides



"Mineral-based insecticides are derived from natural mineral sources and protect crops against harmful pests, helping reduce damage and increase yields."

Nadim Dostert, Global Product Manager Biofa

	Against	Contains	Crops	Concentration	Certifications	Manufacturer
SilicoSec®	Crawling insects, moth larvae and weevils (Sitophilus spp., Oryzaephilus surinamensis, Rhizoperta dominica, etc.)	100% Silicon dioxide Kieselguhr (Diatomaceous earth)	For the control of crawling insects in grain, grain warehouse and empty storage rooms.	1000 g/kg	NOP (KIWA), JAS (KIWA), Demeter international (FiBL list), EU organic (KIWA, FiBL list)	Biofa

Formulation: Dusting powder Shelf life and storage: 2 years. Store in a dry place. Restrictions: None Pack sizes: 2 kg and 15 kg Raw material option: No



Grain weevil activity in storage facilities

# **Biofungicides**



"Biofungicides include natural organisms or substances, such as bacteria, fungi, or natural minerals, used to prevent or control fungal diseases in crops."

Tim Kirkman, Global Product Manager, Andermatt PHP

	Against	Contains	Crops	Formulation type	Concen- tration	Certifications	Manufacturer	Restrictions
AmyProtec® 42	Rhizoctonia, Fusarium, Phytophthora, Erwinia	Bacillus vele- zensis (syn Bacillus amy- loliquefaciens spp. Planta- rum) FZB42	Wide range of crops	Suspension concentrate	>2.5×10 <sup>10</sup> CFU/ml	NOP (OMRI)	ABiTEP	Do not mix with products containing copper
Curatio®	Scab, Powdery mildew, Sooty blotch, Marssonina, Monilia and Taphrina deformans		Pome fruit, stone fruit, grape and others	Dispersible concentrate	380 g/l	Demeter international, EU organic (FiBL list)	Biofa	Apply as solo treatment
T-77®, Atroverde® 77, Eco-77®	Botrytis spp, Sclerotinia, Trunk diseases, Monilinia spp., etc.	Trichoderma atroviride strain 77B	Grape, tomato, onion, straw- berry and other berries, stone fruit, legumes, cocoa and others	Wettable powder**	2×10 <sup>9</sup> CFU/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP	Mix into paste before adding to spray tank, incompatible with certain fungicides
T-Protec® Easy Flow; Eco-T® Ezi-Flo	Rhizoctonia, Fusarium, certain Phytophthora spp., Pythium and potentially others	Trichoderma asperellum strain kd	Row crops such as maize, soyabean, drybeans	Powder for dry seed treatment**	2×10 <sup>9</sup> spores/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP	Incompatible with certain fungicide products
T-Protec®, Eco-T®	Rhizoctonia, Fusarium, certain Phytophthora spp., Pythium and potentially others	Trichoderma asperellum strain kd	Wide range of crops	Wettable powder**	2×10 <sup>9</sup> spores/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP	Mix into paste before adding to spray tank, incompatible with certain fungicides
VitiSan®, Biocarb K	Powdery mildew, Scab, Botrytis, Gloesporium, Monilia	Potassium bicarbonate	Grape, pome fruit, stone fruit, tomato, berries and others	Soluble Powder	989,9 g/kg	VitiSan: Demeter international (FiBL list), EU organic (KIWA, FiBL list); Biocarb K: EU organic (Ecocert), NOP (Ecocert)		Do not mix with acidic products
NatriSan®	Powdery mildew	Sodium bicarbonate	Grapes	Soluble Powder	989,9 g/kg	Demeter international, EU organic (FiBL list)	Biofa	Do not mix with acidic products
Shelf life: 2 years				Dools oimon	Available on r	o muse at		

Shelf life: 2 years Storage: Cool and dry, no frost unless indicated Storage\*\*: Refrigerate (4–10 °C) for maximum shelf life

Pack sizes: Available on request Raw material option: AmyProtec42 Application type: Varies across products, please refer to www.andermatt.com

## **Bionematicides**



"If you compare the roots of untreated plants to those of plants treated with Nembac® 42, the effects are immediately visible, as you will see significantly fewer root galls."

Gabriela Godoy Vega, Global Product Manager ABiTEP

	Against	Contains	Crops	Formulation type	Concentration	Manufacturer
Nembac® 42	Meloidogyne incognita and Pratylenchus brachyurus	Bacillus velezensis FZB42	Soybean, potato, tomato and others	Suspension concentrate	> 2.5×10 <sup>10</sup> CFU/ml	ABiTEP

Shelf life and storage: 24 months at room temperature Application type: Seed treatment or in-furrow Certifications: None

Pack sizes: 1 L, 5 L, 10L, 20 L, 1000 L Raw material option: Yes Restrictions: Do not mix with products containing copper

Nembac® 42 trials on tomatoes in Argentina, showing treated (right) vs. untreated (left).

For more details on the trial please contact Gabriela Godoy Vega, godoy@abitep.de.





## **Biostimulants**



"Biostimulants help growers produce more with less. By targeting specific natural growth processes, they unlock potential for growth, yield, quality, stress tolerance, and more."

Peter Thorpe,
Global Product Manager
Andermatt Madumbi

#### **Microbial Biostimulants**

	Key benefits	Contains	Formulation type	Concentration	Certifications	Manu- facturer	Restrictions
RhizoVital® C5, C5 Tundrabac®, RhizoPlus®	Enhanced root development, high cold tolerance (active from 8 °C)	Bacillus atrophaeus ABi05	Suspension concentrate	≥2.5×10 <sup>10</sup> CFU/mI	Demeter international, EU organic (FiBL list)	ABiTEP	Do not mix with products containing copper
RhizoVital® C5 SB	Enhanced root development, high cold tolerance (active from 8 °C)	Bacillus atrophaeus ABi05	Wettable Powder	≥1×10 <sup>9</sup> CFU/g		ABiTEP	Do not mix with products containing copper
RhizoVital® P45, Phosbac®	Phosphate mobilization	Bacillus velezensis FZB45	Suspension concentrate	≥2.5×10 <sup>10</sup> CFU/ml	Demeter international, EU organic (FiBL list)	ABiTEP	Do not mix with products containing copper
RhizoVital® P45 SB	Phosphate mobilization	Bacillus velezensis FZB45	Wettable Powder	≥1×10 <sup>9</sup> CFU/g		ABiTEP	Do not mix with products containing copper
T-Gro®	Enhances root health and development	Trichoderma asperellum strain kd	Wettable powder**	2×10 <sup>9</sup> CFU/g	EU organic (Ecocert), NOP (Ecocert)	Andermatt PHP	Pre-mix into a paste essential; avoid certain fungicides

Shelf life: 24 months Storage: Room temperature (< 25 °C) Storage\*\*: Refrigerate (4–10 °C) for maximum shelf-life Crops: For use on all crops Pack sizes: Available on request Raw material option: RhizoVital®C5 and P45 Application type: Seed treatment, in-furrow, drench, spray or hydroponics

#### Non-microbial biostimulants

	Key benefits	Contains	Standard rate	Manufacturer	
Zimbili®, Root-UPP®	Promotes root development, directly support- ing the plant as well as beneficial soil microbes. Germination and early growth are promoted as well as abiotic stress relief.	L-Tryptophan and L-amino acids in kelp (Ecklonia maxima) extract	250 ml-2 l/ha or 2-5 ml/kg seed		
Shoot-UPP®	Promotes photosynthesis and vegetative growth. Enhances nutrient uptake and promotes abiotic stress relief.	Organic acids including L-amino acids with Vitamin C	1-4 I/ha	Andermatt Madumbi	
Xantela®, Set-UPP®	Stimulates flowering and fruit quality (i.e. Brix). Reduces stress-related fruit and nut drop.	Plant extracts including polyamines, L-amino acids and Seaweed (Ascophyl- lum nodosum)	250 ml-1 l/ha	Andermatt Madumbi	

Formulation: Suspension concentrate Shelf life and storage: 2 years at room temperature (>5–25 °C) Certifications: None Restrictions: None

Pack sizes: 1 L, 5 L, 20 L, 1000 L Raw material option: Available on request Crops: For use on all crops

# **Biostimulant Seed Treatments**



"Healthy crops start with strong seeds. Seedapplied microbial biostimulants deliver beneficial microbes directly where they're needed, from day one and at the root. This supports early root growth, better nutrient uptake, and gives crops the best start to the season."

Serge Caston,
Global Product Manager
ABiTEP

# Microbial biostimulants specifically formulated for use as seed treatments and for use with mechanical planters

	Key benefits	Contains	Formulation type	Concentration	Certifi- cations	Manu- facturer	Restrictions
Nexula®-N Easy Flow	Natural nitrogen fixer	Priestia megaterium PHP1706	Powder	2×10 <sup>7</sup> CFU/g		Andermatt PHP	Do not mix with products containing copper
RhizoVital® C5 TB	Enhanced root development, high cold tolerance (active from 8°C)	Bacillus atrophaeus ABi05	Powder (talcum- based)	≥1×10 <sup>9</sup> CFU/g		ABiTEP	Do not mix with products containing copper
RhizoVital® P45 TB	Phosphate mobilization	Bacillus velezensis FZB45	Powder (talcum- based)	≥1×10 <sup>9</sup> CFU/g		ABiTEP	Do not mix with products containing copper
T-Grow® EZ Flow, T-Gro® Easy Flow, Eco-T® Ezi-Flo	Enhances root health and development	Trichoderma asperellum strain kd	Powder**	2×10 <sup>9</sup> CFU/g	EU organic (Ecocert), NOP (Ecocert)	PHP	Cannot be mixed with certain fungicides

Shelf life: 24 months Storage: Room temperature (< 25 °C) Storage\*\*: Refrigerate (4–10 °C) for maximum shelf-life Crops: For use on all crops Pack sizes: Available on request Raw material option: RhizoVital®C5 and P45 Application type: Seed treatment, apply directly to the seed in the hopper, do not mix with water.

## **Macrobials**

Macrobial solutions complement our existing products, giving growers even more effective and sustainable options to protect their crops.



"Our goal is to make natural pest control practical and accessible for every grower. With our broad range of macrobial solutions, we support sustainable production across many different crops in Europe."

Simon Fleischli, CEO, Andermatt Nederland



"In Kenya and across East Africa, ornamental growers face unique pest challenges. Our diverse macrobial range provides reliable, sustainable solutions that protect valuable crops while reducing dependence on chemical pesticides. By using these solutions, growers can keep their crops healthy and thriving while supporting a healthier environment for all."

Stephen Musyoka, General Manager, Andermatt Kenya

	Species name	Target pest	Areas of application
Phytogard	Phytoseiulus persimilis	Two-spotted spider mite	Foliar application on ornamentals, 50–100 mites/m <sup>2</sup>
Caligard	Amblyseius californicus	Spider mites, thrips, whiteflies and certain psyllids	Foliar application on ornamentals 15 mites/m <sup>2</sup>
Hypogard	Hypoaspis miles	Thrips, Fungus gnats and shore fly larvae	Applied on growing media 100 mites/m² every 2 weeks.
Ambygard T	Amblyseius cucumeris	Thrips, incl. Western flower thrips and spider mites	Foliar application on ornamentals, 200 mites/m² weekly
Montgard	Transeius montdorensis	Thrips, whiteflies and rust mite	Foliar application 50–100 mites/m <sup>2</sup>

Macrobial solutions from Andermatt Kenya, available to growers in Kenya and East Africa.

	Product	Species name	Target pest latin name	Area	as of application	Life stage
Aphids	Adalia	Adalia bipunctata	Eucallipterus tiliae; Macrosiphum rosae	i <b>.</b>	7.5	Adults/Larvae
	Propylea	Propylea quatuordecimpunctata	Macrosiphum euphorbiae; Myzus persicae; Aulacorthum solani	#	•	Adults
Armoured scales	Chilix	Chilocorus nigritus	Aspidiotus nerii; Abgrallaspis cyanophyli; Diaspis boisduvalii; Diaspis echinocacti; Gymnaspis aechmeae	**	•	Adults
	Scalex-AM	Aphytis melinus	Aspidiotus nerii; Abgrallaspis cyanophyli; Chrysomphalus dyctiospermi; Aonidiella aurantii	#	<b>f</b> a	Adults
	Cybos	Cybocephalus nipponicus	Aspidiotus nerii; Abgrallaspis cyanophyli; Diaspis boisduvalii; Diaspis echinocacti; Gymnaspis aechmeae	#		Adults
	Scalex-EC	Encarsia citrina	Aspidiotus nerii; Abgrallaspis cyanophyli; Diaspis boisduvalii; Chrysomphalus dyctiospermi; Aonidiella aurantii	#	<b>f</b> a	Adults
_	Karnyothrips	Karnyothrips melaleucus	Aulacaspis rosae; Aspidiotus nerii	#	f <sub>0</sub>	Adults
	Lindix	Rhyzobius lophanthae	Diaspis boisduvalii; Aulacaspis rosae; Aspidiotus nerii; Diaspis boisduvalii; Diaspis echinocacti	*	<u>ि</u> जि	Adults
Soft scales	Saisin-MF	Metaphycus flavus	Saissetia coffeae; Saissetia oleae; Coccus hesperidum; Protopulvinaria pyriformis	*	<mark>∱a i±</mark>	Adults
	Coccin	Microterys nietneri	Coccus hesperidum	#	f <sub>6</sub>	Adults
	Exochomus	Exochomus quadripustulatus	Pulvinaria spp.; Phyllaphis fagi; Eriosoma lanigerum	i <b>.</b>	<b>♦</b> ७७	Adults/Larvae
	Rhyzobius forestieri	Rhyzobius forestieri	Saissetia spp.	#	<b>6</b>	Adults
	Saisin-C	Coccophagus scutellaris	Saissetia spp.; Parthenolecanium spp.; Coccus hesperidum; Protopulvinaria pyriformis	#	<b>↑</b>	Adults
Mealybugs	Citrix-AP	Anagyrus pseudococci	Planococcus citri	*	f <sub>0</sub>	Adults
	Citrix-Mix	Anagyrus pseudococci; Leptomastix dactylopii and Leptomastidea abnormis	Planococcus citri	#	<b>1</b> 6	Adults
	Citrix-LA	Leptomastidea abnormis	Planococcus citri	*	<u>f</u>	Adults
	Citrix-LD	Leptomastix dactylopii	Planococcus citri	#	<b>1</b> 6	Adults
	Longix-AF	Anagyrus fusciventris	Pseudococcus longispinus	#	<u></u>	Adults
	Longix-CA	Cryptanusia aureiscutellum	Pseudococcus longispinus	#	<u></u>	Adults
	Pemac	Acerophagus maculipennis	Pseudococcus viburni	#	<u></u>	Adults
	Cryptos	Cryptolaemus montrouzieri	Planococcus spp.; Pseudococcus spp.; Phenacoccus spp.	#	<b>♣</b> 🖝	Adults/Larvae
	Aponix	Leptomastix epona	Pseudococcus solani	#	<b>∱</b>	Adults
Cockroaches	Periplan	Aproctocetus hagenowii	Periplaneta australasiae; Periplaneta americana	16		Adults
Thrips	Paratrip	Thripoctenus javae	Heliothrips haemorrhoidalis	#	f <sub>0</sub>	Adults
	Predatrip	Franklinothrips vespiformis	Echinothrips americanus; Thrips parvispinus; Frankliniella occidentalis	#	<b>1</b> 6 <b>⊎</b> 75	Adults
Cushion scales	Rodolia cardinalis	Rodolia cardinalis	Icerya purchasi	*	<b>☆</b> ♥	Adults

 $Macrobial\ solutions\ from\ Andermatt\ Netherlands, available\ to\ growers\ in\ selected\ countries\ across\ Europe.$ 

Healthy Food and Healthy Environment, for all