

BIOCULT[®] ML45

CE

PFC 6(A) – Microbial Plant Biostimulant

Ingredients:

CMC 7: Micro-organisms: mycorrhizal fungi: *Funnelliformis mosseae* GW; *Rhizophagus irregularis* EC1; *Claroideoglomus etunicatum* EC2: CMC 1: Virgin materials and substances: Perlite CAS 93763-70-3

Contains a minimum of 160 spores per gram

Instructions for use:

CROP	APPLICATION RATE	APPLICATION METHOD	CLAIMS
Broadacre Crops (EU Biostimulants Group 1)			
Grain Cereals (Wheat, Barley, Oats, Rye, Maize, Sorghum, Rice, Millet, Sweet corn, Popcorn, Triticale)	100g/ha or a maximum of 3g/kg of seed	Apply as a seed treatment, in-furrow application during planting, or via the pivot irrigation post emergence.	- Improves availability of nutrients confined in the soil and the rhizosphere - Improves seedling establishment - Improves root – and plant growth - Improves leaf nutrient content (N, Ca, K, Fe, Mn, Cu, & Mo) - Increases plant sap brix levels - Increases yield - and yield quality potential
Legumes (Dry bean, Green bean, Soybean, Pea, Lentil, Lupins, Clover, Alfalfa (Lucerne), Trefoil, Kudzu, Vetch, Groundnut, Chickpea, Broad bean, Guar, Pigeon pea)	100g/ha or a maximum of 3g/kg of seed		
Oil Seed (Sunflower, Flax)	100g/ha or a maximum of 3g/kg of seed		
Woody Perennial Crops (EU Biostimulants Group 2)			
At Transplantation			
POME AND STONE FRUIT (Apple, Pear, Persimmon, Cherry, Plum, Peach, Nectarine, Quince, Apricot, Prune)	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 50ml suspension per tree, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	

CITRUS (Lemon, Clementine, Tangelo, Nadorcott, Pummelo, Grapefruit, Satsuma Mandarin (Tangerine), Oranges, Calamondin, Citrus Citron, Lime, Kumquat)	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 50ml suspension per tree, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	- Improves availability of nutrients confined in the soil and the rhizosphere (Improve Mycorrhizal Incidence, Soil Ca, -Mg, -SO₄, -N & -P) · - Improves establishment - Improves root development and growth. - Improves plant growth (thicker stems, leaf area, and increase canopy biomass) - Increases plant growth vigour, chlorophyll content, and photosynthesis. - Improves crop tolerance to abiotic stress (Hydric Stress) - Increased Nutrient Use Efficiency (Nutrient Leaf Content N, P, K, Mg, Ca, B, Fe, Zn & Mn) - Increases yield - and yield quality potential
POMEGRANATE	200g / 1200 plants	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per plant, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
VINES (Table grapes, Wine grapes)	200g / 1200 vines	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per vine, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
OTHER WOODY PERENNIALS (Kiwi fruit, Passion fruit, Granadilla)	200g / 1200 plants	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per plant, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
OLIVE	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per plant, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
NUT TREES (Almond, Pecan, Macadamia, Hazelnut, Pistachio, Walnuts, Pine nuts, Chestnut, Cashew)	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per plant, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
BERRIES (Blueberry, Raspberry, Blackberry, Blackcurrant, Strawberry, Gooseberry, Goji berry)	200g / 1200 plants	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per plant, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
HOPS	200g / 1200 vines	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 25ml suspension per vine, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
TROPICAL - AND SUBTROPICAL FRUIT (Mango, Avocado, Litchi, Guava, Fig, Date, Dragon fruit, Prickly pear)	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 50ml suspension per tree, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	

FORESTRY TREES (Eucalyptus, Beech, Birch, Wattles, Oak, Maple, Chestnut, Fir, Spruce, Alder, Poplar, Larch, Juniper, Ash, *Excluding Pine spp.)	200g / 600 trees	Dissolve 200g of Biocult ML45 in 30L water and bring to a suspension. Apply 50ml suspension per tree, directly onto the roots, in the planting hole, before closing the planting hole. Note: Bring the product into suspension before each application.	
In-field or already established orchards, vineyards.			
POME AND STONE FRUIT (Apple, Pear, Persimmon, Cherry, Plum, Peach, Nectarine, Quince, Apricot, Prune)	200g / ha	Apply via the irrigation or as a soil drench. Apply during the onset of the first root flush, following bud burst / or the first shoot growth flush. Additional applications in the season can be applied following any shoot growth flush.	- Improves availability of nutrients confined in the soil and the rhizosphere (Improve Mycorrhizal Incidence, Soil Ca, -Mg, -SO₄, -N & -P) · - Improves establishment - Improves root development and growth. - Improves plant growth (thicker stems, leaf area, and increase canopy biomass) - Increases plant growth vigour, chlorophyll content, and photosynthesis. - Improves crop tolerance to abiotic stress (Hydric Stress) - Increased Nutrient Use Efficiency (Nutrient Leaf Content N, P, K, Mg, Ca, B, Fe, Zn & Mn) Increases yield - and yield quality potential
CITRUS (Lemon, Clementine, Tangelo, Nadorcott, Pummelo, Grapefruit, Satsuma Mandarin (Tangerine), Oranges, Calamondin, Citrus citron, Lime, Kumquat)	200g / ha		
POMEGRANATES	200g / ha		
VINES (Table grapes, Winegrapes)	200g / ha		
OTHER WOODY PERENNIALS (Kiwi fruit, Passion fruit, Granadilla)	200g / ha		
OLIVE	200g / ha		
NUT TREES (Almond, Pecan, Macadamia, Hazelnut, Pistachio, Walnut, Pine nut, Chestnut, Cashew)	200g / ha		
BERRIES (Blueberry, Raspberry, Blackberry, Blackcurrant, Strawberry, Gooseberry, Goji berry)	200g / ha		
HOPS	200g / ha		
TROPICAL - AND SUBTROPICAL FRUIT (Mango, Avocado, Litchi, Guava, Fig, Date, Dragon fruit, Prickly pear)	200g / ha		
FORESTRY TREES (Eucalyptus, Beech, Birch, Wattles, Oak, Maple, Chestnut, Fir, Spruce, Alder, Poplar, Larch, Juniper, Ash, *Excluding Pine spp.)	200g / ha		

Vegetables, Flowers & Medicinal Crops (EU Biostimulants Group 3)				
At Nursery Seedlings				
Bulb vegetables (Onion, Leak, Garlic, Scallions, Lemongrass, Chives, Spring onion)	200g/20,000 seedlings	Apply via the irrigation or as an overhead soil drench. Apply treatment 10 days after emergence	- Improves availability of nutrients confined in the soil and the rhizosphere (Increased Mycorrhizal Incidence, Soil K, Soil Ca, Soil SO4, Soil P, Mycorrhizae colonization) - Improves seedling establishment - Improves root development and growth - Improves plant growth (leaf area, and increase canopy biomass) - Increases plant growth vigour, chlorophyll content, and photosynthesis - Improves crop tolerance to abiotic stress (Hydric Stress) - Increased Nutrient Use Efficiency (PFP N, -P, -K, Leaf N, Leaf K, Leaf Mg, Leaf Ca, Leaf S, Leaf Zn, Leaf Fe, Leaf Mn, Leaf Mo, Leaf B) - Increases yield - and yield quality potential	
Root & Stem Vegetables (Carrots, Radish, Horseradish, Cabbage root, Ginger, Turnip, Parsnip, Artichoke, Sugar beet, Beets, Asparagus)	200g/20,000 seedlings			
Leafy vegetables (Lettuce, Spinach, Kale, Rocket, Fennel, Swiss chard, Parsley, Celery, Watercress, Basil, Dill) *Excluding Brassica crops	200g/20,000 seedlings			
Cucurbits (Pumpkin, Watermelon, Melon, Butternut, Squashes, Baby Marrow, Patty pan, Cucumber,	200g/20,000 seedlings			
Fruiting vegetables (Eggplant, Tomatoes, Okra, Pepino, Capsicum, Peppers, Chilli)	200g/20,000 seedlings			
Ornamentals (cut flowers, florist greens (decorative foliage) bulbs, corms, rhizomes, tubers and roots, cuttings and scions, and nursery stock)	200g/20,000 seedlings			
At In-field or transplantation				
Bulb vegetables (Onion, Leak, Garlic, Scallions, Lemongrass, Chives, Spring onion)	200g/ha	Apply via the irrigation or as a soil drench. Apply first treatment directly after transplanting or 10 days after emergence and repeat the application after one month.	- Improves availability of nutrients confined in the soil and the rhizosphere (Increased Mycorrhizal Incidence, Soil K, Soil Ca, Soil SO4, Soil P, Mycorrhizae colonization) - Improves seedling establishment - Improves root development and growth - Improves plant growth (leaf area, and increase canopy biomass) - Increases plant growth vigour, chlorophyll	
Root & stem vegetables (Carrot, Radish, Horseradish, Cabbage root, Ginger, Turni, Parsnip, Artichoke, Sugar beet, Beets, Asparagus)	200g/ha			
Leafy vegetables (Lettuce, Spinach, Kale, Rocket, Fennel, Swiss chard, Parsley, Celery, Watercress, Basil, Dill) *Excluding Brassica crops	200g/ha			
Cucurbits (Pumpkin, Watermelon, Melon, Butternut, Squashes, Baby Marrow, Patty pan, Cucumber)	200g/ha			

Fruiting Vegetables (Eggplant, Tomato, Okra, Pepino, Capsicum, Pepper, Chilli)	200g/ha	• content, and photosynthesis • Improves crop tolerance to abiotic stress (Hydric Stress) • Increased Nutrient Use Efficiency (PFP N, -P, -K, Leaf N, Leaf K, Leaf Mg, Leaf Ca, Leaf S, Leaf Zn, Leaf Fe, Leaf Mn, Leaf Mo, Leaf B) • Increases yield - and yield quality potential
Tuber vegetables (Potato, Sweet potato)	200g/ha	
Ornamentals (cut flowers, florist greens (decorative foliage) bulbs, corms, rhizomes, tubers and roots, cuttings and scions, and nursery stock)	200g/ha	

Directions for use:

USE ONLY AS DIRECTED

Mixing instructions:

Dissolve 200 g of Biocult ML45 in water and bring into suspension. Apply this suspension through the fertigation system. Once Biocult ML45 has been mixed with water it should be used within 6 hours. Keep the product agitated during application.

Wash application equipment well with soap and water, rinse thoroughly before use. Do not apply through filters smaller than 100 microns.

Compatibility:

The compatibility of Biocult ML45 has not yet been proven with agricultural remedies. Its compatibility with other products may be influenced by several factors. As certain factors may vary from farm to farm, a physical compatibility test must always be performed before such a tank mixture is sprayed. For more information on compatibility or in the event of uncertainty, contact your local sales representative. It is recommended to do a compatibility test on a small area and observe the treated area for 3 days before doing commercial applications.

Recommended storage conditions:

Sealed product must be stored under dry conditions out of direct sunlight at ambient temperatures ($\pm 25^{\circ}\text{C}$) or $5\text{--}10^{\circ}\text{C}$ for up to 24 months.

It is not recommended to use after the expiry date.

Do not store near agricultural remedies.

Information on safety and environment:

EUH 208: Contains Mycorrhizal fungi. Micro-organisms may have the potential to provoke sensitizing reactions.

P102: Keep out of reach of children

P270: Do not eat, drink or smoke when using this product

P280: Wear protective gloves/protective clothing/eye protection/face protection type FFP3

Emergency contact:

In case of emergency, contact: Tel. (+27) 11 823-8000

Additional information:

THE REGISTRATION HOLDER GUARANTEES THE QUALITY IN THIS PACKAGE WHEN THE FOLLOWING IS ADHERED TO.

BIOCULT ML45 IS USED PRIOR TO EXPIRY DATE, STORED PROPERLY, USED UNDER FAVOURABLE SOIL AND WEATHER CONDITIONS. BIOCULT ML45 IS USED IN ACCORDANCE WITH DIRECTIONS FOR USE INDICATED ON THIS PACKAGE.

ALTHOUGH THIS REMEDY HAS BEEN EXTENSIVELY TESTED UNDER A LARGE VARIETY OF CONDITIONS THE REGISTRATION HOLDER DOES NOT WARRANT THAT IT WILL BE EFFICACIOUS UNDER ALL CONDITIONS BECAUSE THE ACTION AND EFFECT THEREOF MAY BE AFFECTED BY FACTORS SUCH AS ABNORMAL SOIL, CLIMATIC AND STORAGE CONDITIONS, QUALITY OF DILUTION WATER, COMPATIBILITY WITH OTHER SUBSTANCES NOT INDICATED ON THE LABEL AND THE OCCURRENCE OF RESISTANT CULTIVARS AGAINST THE REMEDY CONCERNED, AS WELL AS BY THE METHOD, TIME AND ACCURACY OF APPLICATION. THE REGISTRATION HOLDER FURTHERMORE DOES NOT ACCEPT RESPONSIBILITY FOR DAMAGE TO CROPS, VEGETATION, THE ENVIRONMENT OR HARM TO MAN OR ANIMAL OR FOR LACK OF PERFORMANCE OF THE REMEDY CONCERNED DUE TO FAILURE OF THE USER TO FOLLOW THE LABEL INSTRUCTIONS OR TO THE OCCURRENCE OF CONDITIONS WHICH COULD NOT HAVE BEEN FORESEEN IN TERMS OF THE REGISTRATION. CONSULT YOUR SUPPLIER IN THE EVENT OF ANY UNCERTAINTY.

CONDITIONS OF SALE: These goods are manufactured and tested to specific standards and are sold in good faith, however no guarantee is given as conditions and methods under which they are used are beyond the control of the manufacturer. Before using, user should determine the suitability of the product for his/her intended use and user assumes the risk and liability in connection therewith.

Production date: See on packaging Expiry date: 2 years from production date	Batch number: Xxx yyy
200g SOLID 10 g; 20 g; 30 g; 50 g; 100 g; 200 g; 400 g, 500 g; 1 kg; 2 kg; 4 kg; 5 kg; 10 kg; 20 kg; 25 kg; 50 kg; 1 000 kg	Manufacture and supplier: AECI Limited Reg. No. 1924/002590/06 P.O Box 14418 Witfield, 1467 14 Field Road, Lilianton, 1459 Tel: (+27) 11 823-8000 www.aeciph.com / www.aeciworld.com

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