

MINISTRY OF AGRICULTURE, LIVESTOCK AND FOOD SUPPLY  
 MINISTER'S OFFICE  
 SECRETARIAT OF AGRARIAN DEVELOPMENT  
 SECRETARIAT OF AGRICULTURE AND LIVESTOCK DEVELOPMENT AND  
 COOPERATIVISM  
 JOINT NORMATIVE INSTRUCTION SDA / SDC No. 2, OF JUNE 2, 2011  
 D.O.U., June 03, 2011 - Section 1

THE SECRETARY OF ANIMAL AND PLANT HEALTH AND INSPECTION AND THE SECRETARY OF AGRICULTURE AND LIVESTOCK DEVELOPMENT AND COOPERATIVISM, FROM THE MINISTRY OF AGRICULTURE, LIVESTOCK AND FOOD SUPPLY, exercising the powers conferred upon him by arts. 10, 17 and 42 of Annex I of Decree No. 7,127 of March 4, 2010, and art. 7 of Joint Normative Instruction No. 1, of May 24, 2011, in view of the provisions of Laws No. 7,802, of July 11, 1989, No. 10,831, of December 23, 2003, in Decrees No. 4,074, of January 4, 2002, No. 6,323, of December 27, 2007, No. 6,913, of July 23, 2009, and the provisions of Process No. 21000.005413/2011-11, resolve:

Art. 1 To establish the reference specifications of phytosanitary products with the use approved for organic agriculture, in the form of the Annex to this Joint Normative Instruction.

Art. 2 This Joint Normative Instruction shall enter into force on the date of its publication.

FRANCISCO SÉRGIO FERREIRA JARDIM Secretary of Animal and Plant Health and Inspection

ERIKSON CAMARGO CHANDOHA Secretary of Agriculture and Livestock Development and Cooperativism

ANNEX

REFERENCE SPECIFICATIONS OF PHYTOSANITARY PRODUCTS APPROVED FOR USE IN ORGANIC AGRICULTURE

Item 01		
Biological control agent	<i>Cotesia flavipes</i>	
Taxonomic Classification	Kingdom	Animal
	Phylum	Arthropoda
	Class	Insecta
	Sub-Class	Pterygota
	Order	Hymenoptera
	Super Family	Ichneumonoidea
	Family	Braconidae
	Subfamily	Microgastrinae
	Gender	<i>Cotesia</i>
	Species	<i>Cotesia flavipes</i>
	Class of use	Biological insecticide
Form of presentation	Live Insects	
Indication of Use	Biological target	Diatraea saccharalis (sugarcane borer)
	Crops	In all crops with occurrence of the biological target. Agronomic efficiency proved for the sugarcane crop.

		The parasitoids (wasps) should be commercialized as a pupa, but the releases made only
		after 8 to 12 hours from the beginning of the "birth" (emergency) of adults. The level of control of the drill is based on the population of caterpillars and it is recommended to release the wasps each time it is detected the presence of 800 to 1000 caterpillars of <i>Diatraea</i>
		<i>saccharalis</i> per hectare. If the population survey of the drill is not held on the farm, you must release the wasps in areas
		where the intensity of infestation was greater than 2% in the previous harvest. In general, it should release 6000 wasps/ha divided into eight release points (750
		wasps / release point), the amount that can be repeated, after 15 days, when confirmed the presence of 800 to 1000 unparasitized larvae / ha. The releases should be
		held in the evening or morning, avoid the hottest hours of the day.

Note: For the submission of record based on this reference specification shall be presented the taxonomic identification certificate obtained from the educational or research institution, proving the identity of the biological control agent.

Item 02		
Biological control agent	<i>Trichogramma galloi</i>	
Taxonomic Classification	Kingdom	Animal
	Phylum	Arthropoda
	Class	Insecta
	Sub-Class	Pterygota
	Order	Hymenoptera
	Super Family	Chalcidoidea
	Family	Trichogrammatidae
	Family	Trichogrammatidae
	Gender	<i>Trichogramma</i>
	Species	<i>Trichogramma galloi</i>
Class of use	Biological insecticide	
Form of presentation	Live Insects	
Indication of Use	Biological target	<i>Diatraea saccharalis</i> (sugarcane borer)
	Crops	In all crops with occurrence of the biological target. Agronomic efficiency was proved for the sugarcane crop.
		. The releases of <i>Trichogramma galloi</i> must be made when observing the first eggs of <i>Diatraea saccharalis</i> in the crop. Using indirect means such as luminous traps and pheromone traps, one can determine the level of the pest population. It is recommended
		the release of 1.6 parasitoids per egg of the pest. In general, one may release the equivalent to 200,000 parasites / ha, divided in up to
	4 applications. The releases must be performed in the	

		early morning, in at least 25 points per ha, and at intervals of 7 days.
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Note: For the submission of record based on this reference specification shall be presented the taxonomic identification certificate obtained from the educational or research institution, proving the identity of the biological control agent.

Item 03		
Biological control agent	<i>Neoseiulus californicus</i>	
Taxonomic Classification	Kingdom	Animal
	Phylum	Arthropoda
	Class	Arachnida
	Order	Acari
	Family	Phytoseiidae
	Gender	Neoseiulus
	Species	<i>Neoseiulus californicus</i>
Class of use	Biological acaricide	
Form of presentation	Live mites	
Indication of Use	Biological target	Tetranychus urticae (spider mite)
	Crops	In all crops with occurrence of the biological target. Agronomic efficiency proved for the strawberry crop. At the beginning of the
		infestation the mite prefers the older leaves, colonization occurs in the lower part of the leaves, where it produces large amounts of web and causes the formation of silver-white spots, visual symptoms which facilitate
		the detection of mite. The releases of <i>Neoseiulus californicus</i> should be performed in the beginning of the spider mite infestation in the crop. In general, one can release the equivalent to 20,000 mites / ha, possibly being
		necessary 2 releases, at monthly intervals.

Note: For the submission of record based on this reference specification shall be presented the taxonomic identification certificate obtained from the educational or research institution, proving the identity of the biological control agent.

Item 04			
Plant Bait based on <i>Tephrosia candida</i>			
Active Ingredient	Tephrosia candida (Leguminosae) Common name: Tefrósia; Anil White		
	Active ingredient (marker): saponinic flavones of rotenoid type.		
Composition			
Description	FUNCTION	Minimum	Maximum
		% (m / m) and g / kg of the p.c.	% (m / m) and g / kg of the p.c.

Tephrosia candida (aerial part of dried plant) containing 0.4 to 0.5% of Saponinic Flavones of rotenoid type	Active Ingredient	22% (220 g / kg)	46% (460 g / kg)
Citrus pulp (dried plant)	Attractive	50% (500 g / kg)	70% (700 g / kg)
Degummed soybean oil	Lubricant and binder	4% (40 g / kg)	8% (80 g / kg)
Oily extract of Psychotria marcgravii * (30%) cold pressed (free of fluoracetamida)	Attractive	0.6% (6 ml / kg)	1.2% (12ml/kg)
Class of use	Formicide		
TYPE OF FORMULATION	Granulated bait in bait holder		
Indication of Use	Biological target	(Leaf-Cutter Ants) Atta sexdens rubropilosa and Atta laevigata	
	In agricultural areas with occurrence of the biological target.	Agronomic efficiency proven at the dose of 10g/m <sup>2</sup> of the anthill area.	

pc: Commercial Product

\* Synonymy: Palicourea marcgravii

Note 1: For the submission of record based on this reference specification shall be presented the taxonomic identification certificate obtained from the educational or research institution, proving the identity of the used plant species.

Note 2: This formulation is mandatorily presented aliquoted in 10 g bait holder packs allowing the direct application of the product onto the soil without handling the bait. Condition imposed to avoid risk of eye irritation by formation and suspension of dust from the product.