

BUGFLOW

It gets them where they need to be



Instruction Manual



BIOBEE
Inspired by Nature

Warning:

For your personal safety, **read & understand** before using.
Save these instructions for future reference.

BUGFLOΣ

Thank you for choosing BUGFLOΣ for your biological pest control application needs. This device has been specifically developed and designed by experienced IPM professionals. BUGFLOΣ is an innovative blower attachment for the uniform release and application of beneficial insects and mites in both greenhouse and field-grown crops.

ADVANTAGES

1. Consistent & uniform application of beneficial mites and their feed on the crop for a distance of up to 4 m (13 feet)
2. Easily adjustable flow rate
3. High survival rate of beneficial mites during application
4. Saves time and labor in comparison to manual application

SAFETY AND PROTECTION

1. Always use eye and ear protection.
2. Use a dust mask specially designed to filter out microscopic particles.
3. Work in a well ventilated area.
4. Hold the device only from the designated areas.
5. Batteries must be disconnected when BUGFLOΣ is not attached to the blower or in use.
6. Follow the Blower and battery manufacturer's instructions.
7. Use the device only for its intended purpose.

COMPONENTS

- | | |
|--------------------------|--------------------------------|
| 1. BUGFLOΣ main body | 6. Funnel |
| 2. Funnel joint | 7. Rotor |
| 3. Application rate dial | 8. Carry strap attachment loop |
| 4. Nozzle attachment | Carry strap included |
| 5. Battery housing | |

The Makita blower models suitable for use: DUB 182/185

Requires a 10.8 volt battery/model BL1013

BLOWER & BATTERIES NOT INCLUDED

BUGFLOΣ

ASSEMBLY

- A. Align the two nozzle protrusions (4) with the corresponding grooves in the blower and turn to lock place.
- B. Align the protrusions of the funnel joint (6) with the aperture of the nozzle (2) and push to click in place.
- C. Slide the battery cartridge (not included) in the battery house (5) until it locks in place with a click.
- D. Adjust the application rate dial (3) to the desired rotor speed.

COMPONENTS



IMPLEMENTATION GUIDELINES

1. Once assembled, run the blower while the funnel is empty to ensure the rotor is spinning and the air is flowing properly through the barrel.
2. Adjust the settings on the settings dial and open the funnel lid.
3. Place the materials to be released in the funnel (a maximum of 3 liters).
4. Close the funnel lid, point the BUGFLOΣ towards the area to be sprayed.
5. Walk at a constant speed while holding the blower at the right angle to best cover the crop and ensure a uniform spread of the material on the crop.
6. Use the shoulder carry strap to reduce fatigue during application.

Important

The rotor will start and stop automatically with the air from the blower!

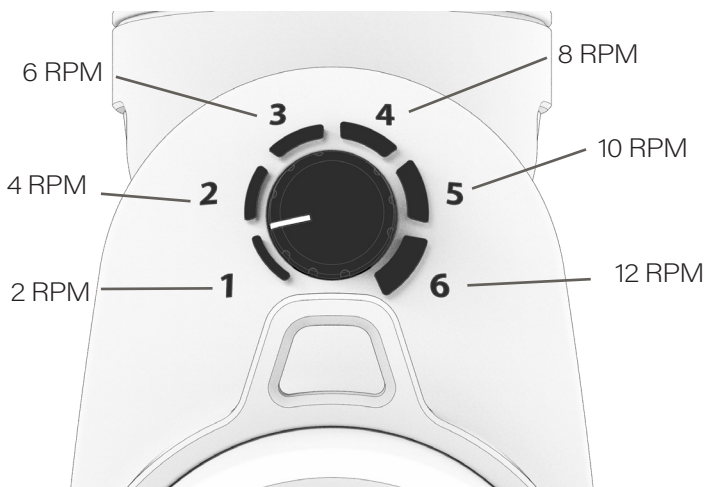
When air flows the rotor rotates, when the air flow stops, the rotor stops.

Ensure no foreign objects enter the funnel. Small contaminants (e.g. pebbles) can block the rotor from spinning.

WARNING

DO NOT PUT FINGERS IN ROTOR IT MAY CAUSE SERIOUS INJURY

APPLICATION RATE SETTINGS FOR BLOWER INTENSITY



RATE APPLICATION SETTING GUIDELINES

Follow the formula:

$$\frac{\text{The volume of the material to be spread (liters) X 30}}{\text{Average dispersion time for the volume (minutes)}} = \text{Desired rpm}$$

Example:

In order to spread a 1 liter (1,000 cc) cylinder, when the spreading time is 10 minutes:

$$\frac{1 \times 30}{10} = 3 \text{ rpm}$$

If in doubt of the correct rate application setting for your beneficial mite, consult your BioBee representative.

EXPECTED FLOW CHART FOR INITIAL CALIBRATION

Final adjustment must be made in light of the actual data.

Estimated walking speed 1.3 m/sec

Application range 3 m

Blower intensity 1

Product	Carrier material	Dial setting	RPM	CC/ second	Time to empty 1 L (min)	Product volume (cc)	Mobiles /cc	Mobiles /second	Mobiles /sqm
BioPersi+ 10K mites (10,000 mobiles)	■	Min	0.66	0.73	22.9	500	20	15	4
		Med	6.45	3.20	5.2	500	20	64	16
		Max	12.25	6.54	2.5	500	20	131	34
BioCalifornicus 25K mites 1 liter (25,000 mobiles)	■	Min	0.66	0.77	21.7	1,000	25	19	5
		Med	6.46	3.30	5.0	1,000	25	83	21
		Max	12.25	6.88	2.4	1,000	25	172	44
BioSwirski 50K mites 1 Liter (50,000 mobiles)	□	Min	0.66	0.74	22.5	1,000	50	37	10
		Med	6.46	2.68	6.2	1,000	50	134	34
		Max	12.25	5.99	2.7	1,000	50	300	77
BioCIFeed 1 Liter (5,000,000 mobiles)	■	Min	0.66	0.58	28.7	1,000	5,000	2,900	744
		Med	6.46	1.87	8.9	1,000	5,000	9,350	2,397
		Max	12.25	4.67	3.5	1,000	5,000	23,350	5,987

STORAGE & MAINTENANCE

Always make sure that the tool is switched off before attempting to perform inspection or maintenance.

The tool, rotor and its components must be kept clean, clean them using air pressure. Store BUGFLOΣ and accessories in a dry, dust-free area, protected from direct sunlight.

SERVICE & WARRANTY

The 12 month warranty is valid from the purchase date and will be provided with proof of the original purchase invoice.

The warranty will not apply in the following cases:

1. Failure to follow the instructions (operation, storage and maintenance).
2. Breakage or penetration of a hard foreign object.
3. If changes were made to the device other than by the BioBee laboratory.

Repair and adjustment services will be performed by the BioBee company from which the product was purchased. The customer will be responsible for transferring the device to the seller.

BioBee is not liable for any direct or indirect damage to the BUGFLOΣ caused by the use of biological materials other than those supplied by BioBee.



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