

1.

### Two-tube design

Overlapping 24-inch fans cover the entire strawberry bed with high-speed air

2.

### Raised baffle system

High-porosity perforated plate six-inches above the outlet improves system efficiency and increases inlet air speed

3.

### Circular ducting

24.5-inch tubes yield improved fan efficiency and increased *Lygus* spp. removal

## Equipment operation

- ❖ 2600 PSI pump pressure
- ❖ 90 horsepower tractor
- ❖ 500 PTO RPM
- ❖ 2 mile/hour travel speed

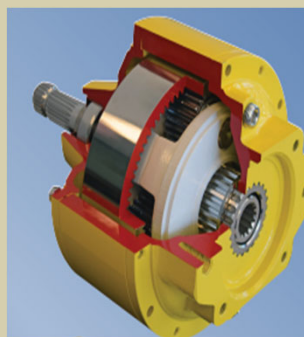


Proportion of <i>Lygus</i> spp. population removed (% +/- SEM)							
Bug Vacuum	10/16/18	10/17/18	10/24/18	10/25/18	10/30/18	10/31/18	10/14/19
Grower Standard	2% (+/- 0.4)	4% (+/- 0.7)	13% (+/-2.4)	6% (+/-2.1)	10% (+/-1.3)	13% (+/- 2.4)	10% (+/- 2.7)
Double Barrel	5% (+/- 1.1)	4% (+/-0.2)	33% (+/-1.9)	21% (+/-5.1)	22% (+/-1.6)	24% (+/-1.4)	25% (+/- 4.9)

❖ 2.3-fold increase in *Lygus* spp. removal when compared to grower standard across all trials

## Field tested components

- ❖ Fan – Multi-wing 24/5-5/28.5/PAG/2ZR
- ❖ Motor – Danfoss SNM2/17
- ❖ Pump – Eaton 420 series ADU080L
- ❖ Gearbox – AuburnGear Model 8 PTO Drive



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