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**Turfgrass:** Poa pratensis L.

**Bluegrass billbug:** Sphenophorus parvulus

**Ants:** Mixed species

**Billbug adult control, 1989:** Treatments were applied on May 23 for adult billbug control at Oakland Hills Country Club - South (Birmingham, MI) on irrigated bluegrass rough. A CO<sub>2</sub> sprayer with four 80° nozzles was calibrated to apply 170 gal H<sub>2</sub>O/acre at 50 PSI. Treatment plots were 6' x 12' with 4' borders between plots. Each treatment was replicated six times. On July 17 and 24, six 0.25 ft<sup>2</sup> samples were dug from each plot to assess billbug larvae and damage. The number of live larvae and damaged crowns with frass were added together for an index of billbug activity. The number of ant colonies found was recorded for replications 2-6.

Dursban DF at 1 and 2 lb ai/A was more effective than Dursban ME20 for adult billbug control. All Dursban treatments had less billbug activity than the control. However, the 0.5 lb ai per acre rates did not provide adequate control.

### Billbug Control

1. Dursban DF more effective than Dursban ME.
  2. Rates of 1.0 or 2.0 lbs a.i. per acre required for adequate control.
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\* Home lawns: Triumph or Dursban in May for adults.  
 Triumph, Diazinon or Oftanol in June for larvae.

Treatment	Rate (lbs ai/A)	Billbug activity index (live larvae & damaged crowns per 1.5 sq ft)
Dursban 50DF	1	1.8 a
Dursban 50DF	2	2.3 ab
Dursban ME20	1	3.7 ab
Dursban ME20	2	4.7 ab
Dursban ME20	0.5	5.2 ab
Dursban 50DF	0.5	5.2 ab
Control		8.0 b

Treatment	Rate (lbs ai/A)	Mean number of ant colonies/1.5 sq ft
Dursban 50DF	2	2.0 a
Dursban 50DF	0.5	3.2 ab
Dursban 50DF	1	3.6 ab
Dursban ME20	2	4.0 ab
Control		4.8 ab
Dursban ME20	1	5.0 ab
Dursban ME20	0.5	7.4 b