

0105 – (General) **TURF:** Agrotis palustris (Huds) and
Poa annua L.
Honey Ant; Prenolepis imparis (Say)

D. R. Smitley & T. W. Davis
Department of Entomology
Michigan State University
East Lansing, MI 48824-1115
(517) 355-9672
tdavis@msu.edu

ANT MOUNDING ON A GOLF COURSE FAIRWAY, 2001: An irrigated bentgrass section of the ninth fairway at Shadow Ridge Golf Course in Ionia, MI was divided into sixty-six 12 ft X 12 ft plots with 3 ft walkways between them. Each treatment was replicated 6 times. Plots were blocked based on precounts taken on 14 Jun. The treatments were applied on 15 Jun with either a CO₂ powered R&D backpack boom sprayer at 175 gal finished spray/acre at 50 psi with four 8008 nozzles or with a hand-held shaker. Plants were evaluated on 14 Jun, 22 Jun, 29 Jun, 6 Jul, 12 Jul, 20 Jul, 26 Jul and 2 Aug by counting active ant mounds in each plot.

Dursban 50 W gave good initial knockdown, provided excellent control for the first 4 weeks and, at week 6, the ant population was still less than 50% that of the check plots. Talstar F reduced ant mounding by 84% and SPG01-027 62% one week after application. Neither of these treatments reduced ant mounding by the second week after application. At week 5 and week 6, the Merit application gave a 50% reduction in mounding compared to the check treatment. The Deltagard, Talstar PL and the EXP 13669 treatments did not affect ant mounding.

Chemical/Formulation	Rate	Ant Mounds per 144 ft ²									
		6/14	6/22	6/29	7/6	7/12	7/20	7/26	8/2		
Control		38.0 a	35.7 c	39.0 b	29.2 b	18.7 b	32.8 bc	34.3 b	38.7 bc		
DeltaGard SC 5%	0.08 lb ai/A	38.8 a	23.8 bc	34.0 b	23.3 b	23.5 b	31.5 bc	29.0 b	49.0 c		
Dursban 50W	4 lb form/A	38.2 a	2.0 a	1.5 a	2.5 a	2.5 a	10.7 a	15.0 a	39.0 ab		
EXP 13669 0.00015%	1.5 lb form/A	41.8 a	36.0 c	36.7 b	25.5 b	17.5 b	29.3 bc	27.3 b	43.8 bc		
EXP 13669 0.00015%	15 lb form/A	40.8 a	34.5 c	42.5 b	28.7 b	26.2 b	41.2 bc	37.2 b	42.8 abc		
Merit 75	8.6 oz/form/A	36.3 a	39.0 c	35.3 b	25.0 b	14.5 b	23.5 b	15.5 a	20.5 a		
SPG01-027 0.2%G	0.2 lb ai/A	40.3 a	13.3 b	39.3 b	27.2 b	22.2 b	44.3 c	30.2 b	41.7 c		
Talstar F 2/3 lb ai/gal	0.2 lb ai/A	41.2 a	6.5 a	24.8 b	16.7 b	15.2 b	33.0 bc	23.7 ab	39.3 bc		
Talstar PL 0.2%G	0.2 lb ai/A	41.7 a	20.0 bc	28.0 b	30.0 b	25.0 b	37.5 bc	36.2 b	15.5 c		

Means followed by the same letter are not significantly different (P<0.05 ANOVA/Fisher's Protected LSD). Data were transformed using log₁₀ (X+1) prior to ANOVA. Untransformed data are presented.