

2/20/2007 Nymph and Adult Cockroach Kill Study

Toxicity tests were conducted on German cockroaches, *Blattella germanica*, with several established insecticides purchased from the store and BioBlock obtained from Homs, LLC. The insecticidal dose was pipetted onto the back (thorax and abdomen, but also wings in case of adults) of each individual cockroach.

Table 1: Comparison of insecticidal compounds (¹d=days, ²n.d.=not determinable).

	7-10 day old nymphs: 5 µL			adults: 10 µL					
	Raid	BioBlock	Surefire	Raid	BioBlock	Surefire	Sevin	Hot Shot	Ortho Home Defense
seconds until death	15	20	88	47	240	117	>3d ¹	>600	>1d
	109	19	>300	25	600	94	>3d	>600	>1d
	90	17	>300	53	279	>600			>1d
	26	21	92	32	51	95			
	21	28	>300	31	557	>600			
	35					167			
	18					>600			
	53					75			
mean	45.9	21.0	n.d. ²	37.6	345.4	n.d.	n.d.	n.d.	n.d.
stdev	35.5	4.2	n.d.	11.8	230.1	n.d.	n.d.	n.d.	n.d.

Table 1 clearly shows that only Raid and BioBlock give reliable results for quick cockroach extermination. Sevin did not kill adult cockroaches at all, even after 3 days. Figure 1 demonstrates that BioBlock is comparable to Raid for nymphal kills, but somewhat slower for adults.

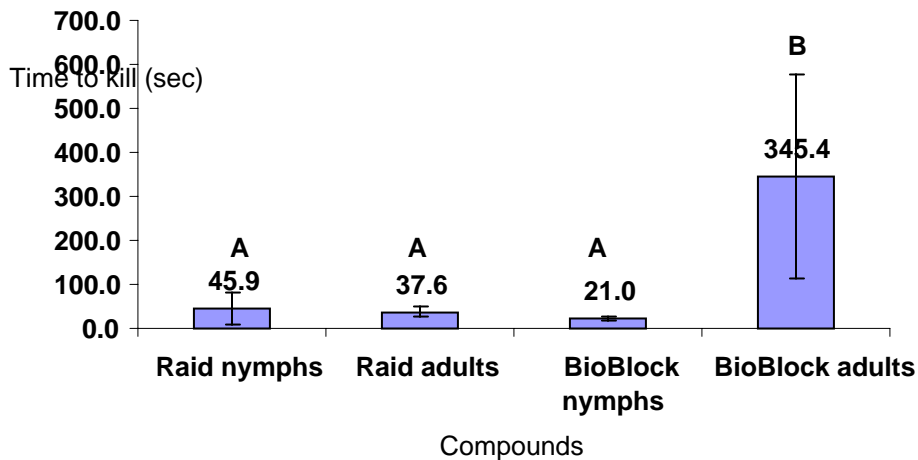


Figure 1. Mean and standard deviation for time to kill in four insecticidal treatments on German cockroaches. Letters depict statistically significant differences (ANOVA) at the 5% level (however, doses are not comparable between adults and nymphs, because different volumes (10 and 5 µL) were used and weights were not taken).