Supplementary Material

Action mode of fipronil and sulfluramid in baits on *Acromyrmex crassispinus* (Forel, 1909) (Hymenoptera: Formicidae) in laboratory conditions

In the format provided by the authors and unedited

Supplementary Data

Materials and Methods. Statistic results

Variable: Weight of dead ants (WDA)

1. Normality test.

DAA	Treatment	Original data			Post-normalization		
		W*	df	Signifi-cance	W*	df	Signifi-cance
1	Control	0.911	22	0.051	0.979	21	0.952
	Fipronil	0.837	22	0.002	0.966	21	0.744
	Sulflura-mid	0.878	22	0.011	0.958	21	0.528
3	Control	0.904	22	0.035	0.990	21	0.999
	Fipronil	0.958	22	0.441	0.987	21	0.996
	Sulflura-mid	0.975	22	0.825	0.990	21	0.998
4	Control	0.912	22	0.052	0.986	21	0.992
	Fipronil	0.955	22	0.395	0.967	21	0.755
	Sulflura-mid	0.943	22	0.233	0.987	21	0.993
5	Control	0.917	22	0.067	0.990	21	0.999
	Fipronil	0.937	22	0.168	0.990	21	0.999
	Sulflura-mid	0.935	22	0.155	0.987	21	0.993
7	Control	0.926	22	0.103	0.981	21	0.965
	Fipronil	0.941	22	0.206	0.981	21	0.964
	Sulflura-mid	0.964	22	0.566	0.995	21	1.000
11	Control	0.952	22	0.353	0.987	21	0.994
	Fipronil	0.966	22	0.611	0.990	21	0.999
	Sulflura-mid	0.958	22	0.457	0.995	21	1.000

2. One-way ANOVA

2.1 Levene's variance homogeneity

	Levene's Test	df1	df2	Significance
NWDA1	27.265	2	60	0.000
NWDA3	23.361	2	60	0.000
NWDA4	22.075	2	60	0.000
NWDA5	20.845	2	60	0.000
NWDA7	22.713	2	60	0.000
NWDA11	22.341	2	60	0.000

2.2 ANOVA

		df	F	Significance
NWDA1	Inter-groups	2	21.267	0.000
	Intra-groups	60		
	Total	62		
NWDA3	Inter-groups	2	38.451	0.000
	Intra-groups	60		
	Total	62		
NWDA4	Inter-groups	2	62.091	0.000
	Intra-groups	60		
	Total	62		
NWDA5	Inter-groups	2	43.321	0.000
	Intra-groups	60		
	Total	62		
NWDA7	Inter-groups	2	67.001	0.000
	Intra-groups	60		
	Total	62		
NWDA11	Inter-groups	2	157.808	0.000
	Intra-groups	60		
	Total	62		

2.3 Posthoc comparation.

	Treatment I	Treatment II	Error typical	Significance
NWDA DAA 1	Control	Fipronil	0.0460750	0.000*
		Sulfluramid	0.0460750	0.196
	Fipronil	Sulfluramid	0.0460750	0.000*
NWDA DAA 3	Control	Fipronil	0.1023253	0.000*
		Sulfluramid	0.1023253	0.012*
	Fipronil	Sulfluramid	0.1023253	0.000*

NWDA DAA 4	Control	Fipronil	0.1181451	0.000*
		Sulfluramid	0.1181451	0.000*
	Fipronil	Sulfluramid	0.1181451	0.000*
NWDA DAA 5	Control	Fipronil	0.2070992	0.000*
		Sulfluramid	0.2070992	0.000*
	Fipronil	Sulfluramid	0.2070992	0.343
NWDA DAA 7	Control	Fipronil	0.2130712	0.000*
		Sulfluramid	0.2130712	0.000*
	Fipronil	Sulfluramid	0.2130712	0.861
NWDA DAA 11	Control	Fipronil	0.2494720	0.000*
		Sulfluramid	0.2494720	0.000*
	Fipronil	Sulfluramid	0.2494720	0.000*

2.4 Student's t-test paired

	df	Control		Fipronil		Sulfluramid	
		t	Significance	t	Significance	t	Significance
DAA1 – DAA3	20	0.622	0.541	-5.854	0.000	-6.793	0.000
DAA3 – DAA4	20	6.066	0.000	-3.749	0.001	-6.781	0.000
DAA4 – DAA5	20	-7.130	0.000	-3.756	0.001	-6.192	0.000
DAA5 – DAA7	20	-9.880	0.000	-3.842	0.001	-5.510	0.000
DAA7 – DAA11	20	-2.915	0.009	-9.139	0.000	-6.682	0.000

Variable: Weight of remanent leaves (WRL)

1. Normality test.

DAA	Treatment	Original data			Post-normalization		
		W*	df	Significance	W*	df	Significance
1	Control	0.984	22	0.967	0.986	16	0.995
	Fipronil	0.803	22	0.001	0.962	19	0.614
	Sulflura-mid	0.860	22	0.005	0.986	17	0.994
3	Control	0.912	22	0.052	0.987	16	0.996
	Fipronil	0.927	22	0.107	0.983	19	0.970
	Sulflura-mid	0.902	22	0.032	0.985	17	0.988

4	Control	0.919	22	0.074	0.991	16	1.000
	Fipronil	0.889	22	0.018	0.970	19	0.773
	Sulflura-mid	0.923	22	0.088	0.976	17	0.911
5	Control	0.960	22	0.490	0.982	16	0.975
	Fipronil	0.807	22	0.001	0.971	19	0.796
	Sulflura-mid	0.934	22	0.148	0.992	17	1.000
7	Control	0.863	22	0.006	0.978	16	0.942
	Fipronil	0.766	22	0.000	0.970	19	0.780
	Sulflura-mid	0.927	22	0.108	0.957	17	0.574
11	Control	0.942	22	0.213	0.987	16	0.996
	Fipronil	0.914	22	0.058	0.980	19	0.941
	Sulflura-mid	0.963	22	0.561	0.954	17	0.525

2. One-way ANOVA

2.1 Levene's variance homogeneity

	Levene's test	df1	df2	Significance
NWRL1	9.875	2	61	0.000
NWRL3	2.355	2	60	0.104
NWRL4	1.703	2	61	0.191
NWRL5	2.957	2	60	0.060
NWRL7	2.832	2	60	0.067
NWRL11	0.557	2	61	0.576

2.2 ANOVA

		df	F	Significance
NWRL1	Inter-groups	2	0.263	0.770
	Intra-groups	61		
	Total	63		
NWRL3	Inter-groups	2	1.859	0.165
	Intra-groups	60		
	Total	62		
NWRL4	Inter-groups	2	74.362	0.000
	Intra-groups	61		
	Total	63		
NWRL5	Inter-groups	2	149.578	0.000
	Intra-groups	60		
	Total	62		
NWRL7	Inter-groups	2	141.009	0.000
	Intra-groups	60		
	Total	62		

NWRL11	Inter-groups	2	66.668	0.000
	Intra-groups	61		
	Total	63		

2.3 Posthoc comparation.

	Treatment I	Treatment II	Error typical	Significance
NWRL1	Control	Fipronil	0.2638130	0.498
		Sulfluramid	0.2668630	0.578
	Fipronil	Sulfluramid	0.2638130	0.908
NWRL3	Control	Fipronil	0.2203704	0.415
		Sulfluramid	0.2203704	0.059
	Fipronil	Sulfluramid	0.2203704	0.275
NWRL4	Control	Fipronil	0.1763871	0.000*
		Sulfluramid	0.1784263	0.000*
	Fipronil	Sulfluramid	0.1763871	0.194
NWRL5	Control	Fipronil	0.1589133	0.000*
		Sulfluramid	0.1589133	0.000*
	Fipronil	Sulfluramid	0.1589133	0.886
NWRL7	Control	Fipronil	0.1315997	0.000*
		Sulfluramid	0.1315997	0.000*
	Fipronil	Sulfluramid	0.1315997	0.111
NWRL11	Control	Fipronil	0.1923743	0.000*
		Sulfluramid	0.1901757	0.000*
	Fipronil	Sulfluramid	0.1901757	0.049

2.4 Student's t-test paired

	df	Control		Fipronil		Sulfluramid	
		t	Significance	t	Significance	t	Significance
DAA1 – DAA3	20	-0.811	0.428	-2.476	0.022	-4.692	0.000
DAA3 – DAA4	20	-2.583	0.018	-9.690	0.000	-6.257	0.000
DAA4 – DAA5	20	3.842	0.001	0.117	0.908	-1.204	0.243
DAA5 – DAA7	20	-3.499	0.002	1.153	0.263	-.284	0.780
DAA7 – DAA11	20	1.221	0.237	1.988	0.061	0.826	0.419