

Supplementary Materials for **Saving the injured: Rescue behavior in the termite-hunting ant *Megaponera analis***

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Other Supplementary Material for this manuscript includes the following: (available at advances.sciencemag.org/cgi/content/full/3/4/e1602187/DC1)

- movie S1 (.mp4 format). An injured ant receiving help by its nestmates.

Supplementary Materials



fig. S1. Illustration of a helping ant and different injury types, as shown in Fig. 1.

(A) Injured minor being carried by a major nestmate. (B) Different types of injury after a raid, with 1. A dead termite soldier clinging on to a minor (termite clinging); 2. A major having lost its left hind leg (lost limb); 3. An intermediate appearing unharmed to the naked eye (appears unharmed) and 4. An injured minor assuming the pupae position after being antennated by a nestmate (pupae position).

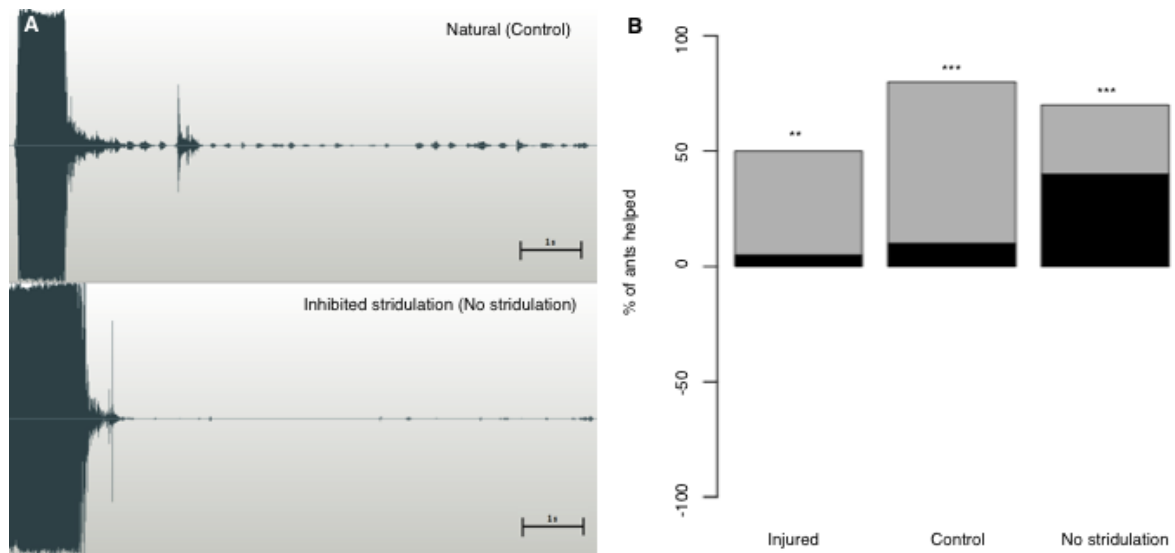


fig. S2. Effect of stridulation on rescue behavior. (A) Sonogram before (top) and after (bottom) disabling the stridulatory organ of *M. analis*. (B) Behavioral response of helper ants towards manipulated ants (n=20). Injured: artificially injured ant, cutting off two legs; Control: artificially injured with acrylic color on thorax; No stridulation: artificially injured with acrylic color covering the stridulatory organ on the gaster.

table S1. Statistical differences in injury-type frequency (Fig. 1A) and speed (Fig. 1B) in injured *M. analis* ants (Kruskal-Wallis test, followed by pairwise comparisons with Bonferroni-corrected Dunn's test; $n = 20$ per test).

Abbreviations: Healthy: Control with healthy ant. Lost limb: ant that partially or completely lost an extremity; Termite clinging: ant that has a termite clinging to its body; Carried unharmed: ant with no discernible injury.

Injury type 1	Injury type 2	Z	P
(A) Kruskal-Wallis test			<0.001***
Lost limb	Termite clinging	-2.6	0.014*
Lost limb	Carried unharmed	0.12	1
Termite bite	Carried unharmed	2.72	0.009**
(B) Kruskal-Wallis test			<0.001***
Healthy	Lost limb	2.89	0.01**
Healthy	Termite clinging	6.29	<0.001***
Healthy	Carried unharmed	1.62	0.3
Lost limb	Termite clinging	3.40	0.002**
Lost limb	Carried unharmed	-1.27	0.61
Termite clinging	Carried unharmed	-4.67	<0.001***

table S2. Statistical differences in running speed of individuals with different stages of injury, as shown in Fig. 3 (Kruskal-Wallis test, followed by Dunn's test with Bonferroni correction; $n = 20$ per test). Abbreviations: Fresh = Ant that freshly lost a leg on each side; Old = Same ant 24 hours later; Healthy = Control with an uninjured ant.

State 1	State 2	Z	P
Kruskal-Wallis test			<0.001***
Fresh	Old	-3.07	0.003**
Fresh	Healthy	3.86	<0.001***
Old	Healthy	0.78	0.65

table S3. Statistical differences in long-term injuries in the different castes, as shown in Fig. 4 (ANOVA test, followed by Tukey post hoc test; $n = 20$ per test).

Caste 1	Caste 2	lwr	upr	P
ANOVA				<0.001***
Major	Intermediate	6.14	22.86	<0.001***
Major	Minor	10.5	27.26	<0.001***
Minor	Intermediate	-3.96	12.76	0.4

table S4. Statistical differences in significance of rescue behavior compared to behavior of healthy individuals, as shown in Fig. 4 (A to D) and fig. S2 [Fisher's exact tests for count data between treatment healthy (no help) and the other categories with Bonferroni correction]. Abbreviations: DMDS = Dimethyl disulphide; DMTS = Dimethyl trisulphide; DMDS/DMTS = 50/50 Solution of dimethyl disulphide and dimethyl trisulphide in hexane; Mg dead = Mandibular gland on dead dummy; Mg alive: Mandibular gland on living nestmate. For explanation of treatments see Fig. 5 A-D description.

Treatment	P	n
Healthy	1	20
Dead	1	20
Foreign	<0.001***	20
Way out	1	20
Hunting	<0.001***	20
Return	0.0013**	20
No stridulation	<0.001***	20
Color control	<0.001***	20
Mg dead	<0.001***	20
Mg alive	0.0013**	20
Dufours	0.013*	20
Poison	0.2	20
DMDS	0.19	20
DMTS	<0.001***	20
DMDS/DMTS	<0.001***	20
Hexane	0.9	20