

Supplemental material

Supplementary Table 1S. Spectral and temporal variables measured for the stridulatory disturbance signal of winged (brachypterous and macropterous) males of *M. spinolai* (mean $\pm$ SD).

Variable	Chirp	Male brachypterous <i>n</i> = 2	Male macropterous <i>n</i> = 4
First quartile frequency (Hz)	Short	1769.5 $\pm$ 215.5	1816.4 $\pm$ 981.3
	Long	1610.1 $\pm$ 56.3	1365.2 $\pm$ 345.4
Third quartile frequency (Hz)	Short	3550.8 $\pm$ 1839.6	4027.3 $\pm$ 1975.2
	Long	2109.4 $\pm$ 66.3	2457.4 $\pm$ 549.9
Inter-quartile frequency (Hz)	Short	1781.2 $\pm$ 2055.0	2210.9 $\pm$ 1033.0
	Long	499.3 $\pm$ 10.0	1092.2 $\pm$ 568.6
Dominant frequency (Hz)	Short	1687.5 $\pm$ 331.5	2125.0 $\pm$ 1202.8
	Long	1797.7 $\pm$ 56.4	1795.3 $\pm$ 230.3
Duration (ms)	Short	15.57 $\pm$ 7.26	10.42 $\pm$ 0.83
	Long	25.52 $\pm$ 15.30	22.31 $\pm$ 3.97
Inter-chirp interval (ms)		2.27 $\pm$ 1.87	2.71 $\pm$ 1.13
Inter-syllable interval (ms)		4.51 $\pm$ 2.65	3.43 $\pm$ 1.31
Syllable repetition rate (syllables/s)		29.96 $\pm$ 20.83	26.68 $\pm$ 4.09
Short/long chirp amplitude ratio (dB)		1.45 $\pm$ 1.85	1.03 $\pm$ 2.30

Supplementary Figure 1S. 3D projection of the stridulatory sulcus.