

**Table S1.** Rearing conditions and food of *Monochamus alternatus alternatus* and *M. a. endai* populations used in Experiments 1–3.

Experiment	1	2 and 3	
Insect	<i>M. a. endai</i>	<i>M. a. alternatus</i>	<i>M. a. endai</i>
Rearing conditions of immature stages <sup>1</sup>	25°C, LD 12:12 h	25°C, LD 16:8 h	25°C, LD 16:8 h
Larval food <sup>2</sup>	<i>P. densiflora</i> bolts	<i>P. densiflora</i> and <i>P. thunbergii</i> bolts	<i>P. densiflora</i> bolts
Conditions to terminate diapause <sup>1</sup>	10°C, LD 12:12 h	N/A	10 °C, LD 8:16 h
Term to terminate diapause	5 months or longer	N/A	9.6 months
Rearing conditions of adults <sup>1</sup>	25°C, LD 12:12 h	25°C, LD 16:8 h	25°C, LD 16:8 h
Adult food <sup>2</sup>	<i>P. densiflora</i> twig	<i>P. densiflora</i> and <i>P. thunbergii</i> twig	<i>P. densiflora</i> and <i>P. thunbergii</i> twig
Oviposition substrate <sup>2</sup>	<i>P. densiflora</i> branch	<i>P. densiflora</i> and <i>P. thunbergii</i> branch	<i>P. densiflora</i> and <i>P. thunbergii</i> branch

<sup>1</sup> For example, LD 12:12 h represents a 12-h light/dark photoperiod.

<sup>2</sup> *P. densiflora* and *P. thunbergii* are *Pinus densiflora* and *Pinus thunbergii* , respectively.