



**Figure S1.** The study area in Southern European Russia showing Köppen-Geiger climate classification and locations sampled for locusts in 2019, 2020 and 2021. The sampling locations (circles with central black dot) are detailed in Table S1. Green circles indicate locations with infected locusts from which *Beauveria* sp. isolates were obtained and white circles locations with uninfected locusts. Cities abbreviations: Atrk – Astrakhan, Elst – Elista, Krsn – Krasnodar, Mhch– Makhachkala, RosD – Rostov-on-Don, Vlgr – Volgograd; Köppen-Geiger climate classification abbreviations: bsk – cold semi-arid climate, cfa – humid subtropical climate, cfb – temperate oceanic climate or subtropical highland climate, dfa – hot-summer humid continental climate, dfb – warm-summer humid continental climate.