ABSTRACT

 Burying beetles faces the pressures of environment and interspecies competition in the wild. The relationship between the trade-off and this factor further affects the direction of its own evolution and development. Previous studies have found that burying beetles in different regions have regional adaptation in the reproduction photoperiod. This study aims to understand whether different environmental and biological pressures will also cause different populations to have different locomotor performances due to regional adaptation. . Therefore, this study used treadmill and breeding temperature preference experiments to understand the physical performance and the preferred breeding temperature of burying beetles in different regions, and to answer whether the population has regional adaptation to the environment and interspecific competition pressure. Results show that both populations exhibit local adaptation in response to environmental stress of temperature.