**Electronic Supplementary Material**

Supplementary Material 1. *Leptoglossus clypealis* native dataset (Table I) and entire distribution dataset (Table II) after reducing the spatial autocorrelation.

Supplementary Material 2. *Leptoglossus occidentalis* native dataset (Table I) and entire distribution dataset (Table II) after reducing the spatial autocorrelation.

Supplementary Material 3. *Leptoglossus clypealis* model evaluation information. Table I: model calibrated with native dataset. Table II: model calibrated with the entire distribution dataset. Best model performances are highlighted in yellow.

Supplementary Material 4. *Leptoglossus occidentalis* model evaluation information. Table I: model calibrated with native dataset. Table II: model calibrated with the entire distribution dataset. Best model performances are highlighted in yellow.

Supplementary Material 5. *Leptoglossus clypealis* and *L. occidentalis* table with information of non-native records predicted in unsuitable areas (not suitable, highlighted in grey) and in areas with novel climatic conditions (non-analog), by the model built with the native dataset.

Supplementary Material 6. *Leptoglossus clypealis* information regarding the number of pixels and percentage of areas predicted as suitable for each continent of the worldwide present and future times models.

Supplementary Material 7. *Leptoglossus occidentalis* information regarding the number of pixels and percentage of areas predicted as suitable for each continent of the worldwide present and future times models.

Supplementary Material 8. Results of niche similarity test. Columns represent niche overlap values of D (in blue), and of I (in red) created in the replicates of the identity test. Arrows indicate actual niche overlap. The X-axis indicates the value of D and I, and the Y-axis shows the number of replicates.

Supplementary Material 9. Results of the background test. Columns represent niche overlap values of D (blue), and of I (red) created in the replicates of the background test. The X-axis indicates the value of D and I, and the Y-axis shows the number of replicates. a: *L. clypealis* compared to the background of *L. occidentalis*. b: *L. occidentalis* compared to the background of *L. clypealis*.