**SUPPLEMENT**

Table S1. Overview of all the herbaria and genebanks from which *Lactuca* samples were retrieved.

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| Academy of Natural Sciences Herbarium |
| Australia's Virtual Herbarium |
| Botanical Society of the British Isles Herbaria |
| California Academy of Sciences |
| Centro de Referência em Informação Ambiental |
| Consortium of Pacific Northwest Herbaria |
| Denver Botanic Gardens Herbarium |
| Eurisco |
| Field Museum |
| Florida State University Herbarium |
| Global Biodiversity Information Facility |
| Harvard University Herbarium |
| Instituto Superior de Agronomia |
| International Lactuca Database |
| Jardim Botanico do Rio de Janeiro |
| Manchester University Herbarium |
| Museum National d'Histoire Naturelle Herbarium |
| Nationaal Herbarium Nederland |
| New York Botanical Garden Herbarium |
| Real Jardin Botanico de Madrid |
| Royal Botanic Gardens Edinburgh |
| Royal Botanic Gardens, Kew |
| Smithsonian Institution, National Herbarium |
| United States Department of Agriculture, National Plant Germplasm System |
| Universidad del Valle Herbarium |
| Universidade Lisboa Museu Nacional de Historia Natural e da Ciência |
| University of California and Jepson Herbaria |
| University of California, Riverside Herbarium |
| University of Coimbra Herbarium |
| V. L. Komarov Botanical Institute |
| Wageningen University Herbarium |
| West Virginia University Herbarium |
| World Vegetable Center |

Table S2. The species in the Lactuca genepool (Table 1) and their synonyms (Van Treuren *et al*., 2012). Author names were included only when they distinguish between different synonyms in the consulted databases (Table S1).

|  |  |
| --- | --- |
| accepted names | synonyms |
| *L. acanthifolia* | *L. amorgina* |
|  | *L. eburnea* |
| *L. aculeata* |   |
| *L. altaica* |   |
| *L. aurea* |   |
| *L. azerbaijanica* |   |
| *L. dregeana* | *L. virosa Thunb.* |
| *L. georgica* |   |
| *L. longidentata* | *Scariola longidentata* |
| *L. orientalis* |   |
| *L. quercina* | *L. altissima* |
|  | *L. armena* |
|  | *L. chaixii* |
|  | *L. sagittata* |
|  | *L. stricta* |
|  | *L. vialea* |
|  | *L. wilhelmsiana* |
|   | *L. cracoviensis* |
|   | *L. cyanea* |
|   | *L. decorticata* |
| *L. saligna* | *L. adulteriana* |
|  | *L. angustifolia* |
|  | *L. caucasica* |
|  | *L. cracoviensis* |
|  | *L. cyanea* |
|  | *L. salicifolia* |
|  | *L. spiciformis* |
|  | *L. tommasiniana* |
|  | *L. virgata* |
|  | *L. virosa Habl.* |
|  | *L. wallrothii* |
| *L. scarioloides* | *L. kotschyana*  |
| *L. serriola* | *L. albicaulis* |
|  | *L. augustana* |
|  | *L. coriacea* |
|  | *L. dubia* |
|  | *L. latifolia* |
|  | *L. plicata* |
|  | *L. scariola* |
|  | *L. sylvestris* |
|  | *L. tephrocarpa* |
|  | *L. virosa Luce* |
| *L. sibirica* |   |
| *L. taraxacifolia* | *L. alaica* |
|  | *L. kotschyi* |
|  | *L. pentaphylla* |
| *L. tatarica* | *L. clarkei* |
|  | *L. multipes* |
|  | *L. oblongifolia* |
|  | *L. pulchella (Pursh) DC.* |
|  | *L. pulchella DC.* |
| *L. viminea* | *L. alpestris* |
|  | *L. chondrilliflora* |
|  | *L. decorticata* |
|  | *L. numidica* |
|  | *L. ramosissima* |
| *L. virosa* | *L. agrestis* |
|  | *L. ambigua*  |
|  | *L. cornigera* |
|  | *L. flavida* |
|  | *L. lactucarii* |
|  | *L. livida* |
|  | *L. serratifolia* |
|  | *L. sinuata* |
|  | *L. virosa L.* |
| *L. watsoniana* |  |

Table S3. The Maxent model statistics for each of the investigated species of the lettuce genepool. ATAUC: the 10-fold average test AUC (area under the curve), STAUC: the standard deviation of the test AUC of the 10 different folds, ASD15: the percentage of the potential distribution coverage with standard deviation above 0.15. For the gray colored species, the total number of samples is smaller than 10 (Table 1), meaning that the number of folds is equal to the number of samples.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Taxon | ATAUC | STAUC | ASD15 | ValidModel |
| *Lactuca acanthifolia* | 0.9984 | 0.0006 | 0 | yes |
| *Lactuca aculeata* | 0.9599 | 0.0667 | 0 | yes |
| *Lactuca altaica* | 0.8728 | 0.0571 | 44.195 | no |
| *Lactuca dregeana* | 0.9896 | 0.0061 | 4.433 | yes |
| *Lactuca georgica* | 0.9973 | 0.0043 | 0 | yes |
| *Lactuca orientalis* | 0.9736 | 0.0240 | 0.610 | yes |
| *Lactuca quercina* | 0.9810 | 0.0341 | 0.055 | yes |
| *Lactuca saligna* | 0.9183 | 0.0044 | 0 | yes |
| *Lactuca saligna\_EUR* | 0.9422 | 0.0048 | 0.037 | yes |
| *Lactuca saligna\_GRC* | 0.9208 | 0.0057 | 0 | yes |
| *Lactuca saligna\_ISR* | 0.9191 | 0.0051 | 0 | yes |
| *Lactuca scarioloides* | NA | NA | NA | no |
| *Lactuca serriola* | 0.6490 | 0.0046 | 0 | no |
| *Lactuca serriola\_TC* | 0.9895 | 0.0060 | 1.450 | yes |
| *Lactuca sibirica* | 0.9596 | 0.0038 | 0 | yes |
| *Lactuca taraxacifolia* | 0.5000 | 0 | NA | no |
| *Lactuca tatarica* | 0.9169 | 0.0061 | 0.126 | yes |
| *Lactuca viminea* | 0.9637 | 0.0043 | 0.003 | yes |
| *Lactuca virosa* | 0.8806 | 0.0042 | 0 | yes |

Figure S1a. The global region of analysis (ALL) and all *L. saligna* occurrences.

Figure S1b. The Eurasian region of analysis (EUR) and its *L. saligna* occurrences.

Figure S1c. The Greek region of analysis (GRC) and its *L. saligna* occurrences.

Figure S1d. The Israeli region of analysis (ISR) and its *L. saligna* occurrences.

Figure S1a



Figure S1b



Figure S1c Figure S1d

 

Figure S2a. The Maxent response curves to BIO\_1 for the model based on all occurrences (model Lactuca\_saligna) and the model for which the Israeli occurrences were omitted (model Lactuca\_salignaISR). The curves show how the logistic prediction changes as the mean annual temperature is varied, keeping all other environmental variables at their average sample value.

Figure S2b. The Maxent response curves to BIO\_5 for the model based on all occurrences (model Lactuca\_saligna) and the model for which the Israeli occurrences were omitted (model Lactuca\_salignaISR). The curves show how the logistic prediction changes as the maximum temperature of the warmest month is varied, keeping all other environmental variables at their average sample value.

Figure S2c. The Maxent response curves to BIO\_15 for the model based on all occurrences (model Lactuca\_saligna) and the model for which the Israeli occurrences were omitted (model Lactuca\_salignaISR). The curves show how the logistic prediction changes as the variation in the precipitation over the seasons is varied, keeping all other environmental variables at their average sample value.

Figure S2d. The Maxent response curves to BIO\_18 for the model based on all occurrences (model Lactuca\_saligna) and the model for which the Israeli occurrences were omitted (model Lactuca\_salignaISR). The curves show how the logistic prediction changes as the total precipitation of the warmest quarter is varied, keeping all other environmental variables at their average sample value.

Figure S2a 



Figure S2b





Figure S2c





Figure S2d



