Data Papers

The Global Naturalized Alien Flora (GloNAF) database

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Abstract. This dataset provides the Global Naturalized Alien Flora (GloNAF) database, version 1.2. GloNAF represents a data compendium on the occurrence and identity of naturalized alien vascular plant taxa across geographic regions (e.g. countries, states, provinces, districts, islands) around the globe. The dataset includes 13,939 taxa and covers 1,029 regions (including 381 islands). The dataset is based on 210 data sources. For each taxon-by-region combination, we provide information on whether the taxon is considered to be naturalized in the specific region (i.e. has established self-sustaining populations in the wild). Non-native taxa are marked as "alien", when it is not clear whether they are naturalized. To facilitate alignment with other plant databases, we provide for each taxon the name as given in the original data source and the standardized taxon and family names used by The Plant List Version 1.1 (http://www.theplantlist.org/). We provide an ESRI shapefile including polygons for each region and information on whether it is an island or a mainland region, the country and the Taxonomic Databases Working Group (TDWG) regions it is part of (TDWG levels 1–4). We also provide several variables that can be used to filter the data according to quality and completeness of alien taxon lists, which vary among the combinations of regions and data sources. A previous version of the GloNAF dataset (version 1.1) has already been used in several studies on, for example, historical spatial flows of taxa between continents and geographical patterns and determinants of naturalization across different taxonomic groups. We intend the updated and expanded GloNAF version presented here to be a global resource useful for studying plant invasions and changes in biodiversity from regional to global scales. We release these data into the public domain under a Creative Commons Zero license waiver (https://creativecommons.org/share-your-work/public-domain/cc0/). When you use the data in your publication, we request that you cite this data paper. If GloNAF is a major part of the data analyzed in your study, you should consider inviting the GloNAF core team (see Metadata S1: Originators in the Overall project description) as collaborators. If you plan to use the GloNAF dataset, we encourage you to contact the GloNAF core team to check whether there have been recent updates of the dataset, and whether similar analyses are already ongoing.

Key words: alien plants; exotic plants; global distribution; naturalized plants; neophytes; non-native plants; species invasions; vascular plants.

The complete data sets corresponding to abstracts published in the Data Papers section in the journal are published electronically as Supporting Information in the online version of this article at https://doi.org/onlinelibrary.wiley.com/doi/10.1002/ecy.2542/suppinfo

DATA AVAILABILITY

Associated data are also available at the iDiv Biodiversity Data Portal: https://idata.idiv.de/DDM/Data/ShowData/257.