

## Supplementary material for DaPhnE phylogeny manipulation

**Supplementary Table 2.** Species names replaced in DaPhnE by their synonyms as found in Vigie-flore database:

Species name available in DaPhnE	Synonym from Vigie-flore (*name available in Daphne but changed to match with trait databases)
<i>Amaranthus chlorostachys</i>	<i>Amaranthus hybridus*</i>
<i>Centunculus minimus</i>	<i>Anagallis minima</i>
<i>Halimione pedunculata</i>	<i>Atriplex pedunculata</i>
<i>Helictotrichon pubescens</i>	<i>Avenula pubescens</i>
<i>Carex otrubae</i>	<i>Carex cuprina</i>
<i>Carex ovalis</i>	<i>Carex leporina</i>
<i>Microrrhinum minus</i>	<i>Chaenorrhinum minus</i>
<i>Calamintha menthifolia</i>	<i>Clinopodium menthifolium</i>
<i>Virga pilosa</i>	<i>Dipsacus pilosus</i>
<i>Roegneria canina</i>	<i>Elymus caninus</i>
<i>Elytrigia repens</i>	<i>Elymus repens</i>
<i>Conyza sumatrensis</i>	<i>Erigeron sumatrensis</i>
<i>Ranunculus ficaria</i>	<i>Ficaria verna</i>
<i>Picris echioides</i>	<i>Helminthotheca echioides</i>
<i>Inula conyzae</i>	<i>Inula conyza</i>
<i>Galeobdolon luteum</i>	<i>Lamiastrum galeobdolon</i>
<i>Coronopus didymus</i>	<i>Lepidium didymum</i>
<i>Cardaria draba</i>	<i>Lepidium draba*</i>
<i>Peplis portula</i>	<i>Lythrum portula</i>
<i>Medicago x varia</i>	<i>Medicago sativa*</i>
<i>Listera ovata</i>	<i>Neottia ovata</i>
<i>Oxalis fontana</i>	<i>Oxalis stricta</i>
<i>Hieracium pilosella</i>	<i>Pilosella officinarum</i>
<i>Persicaria dubia</i>	<i>Polygonum mite</i>
<i>Fallopia japonica</i>	<i>Reynoutria japonica*</i>
<i>Tripleurospermum perforatum</i>	<i>Tripleurospermum inodorum</i>
<i>Pseudolysimachion spicatum</i>	<i>Veronica spicata</i>
<i>Taraxacum sect. Ruderalia</i>	<i>Taraxacum ruderale</i>
<i>Arabis glabra</i>	<i>Turritis glabra*</i>
<i>Elytrigia x laxa</i>	<i>Elymus pungens</i>

### Vigie-flore species not found in Daphne phylogeny and added manually:

Almost all species from Vigie-flore were present in Daphne, except 15 species which were placed to the phylogeny by hand, using existing trees from the literature. We used published molecular phylogenies (see below) to place the missing species on the DaPhnE phylogeny according to their closest relatives using functions of packages phytools (Revell 2012) and ape (Popescu) in R (R Core Team 2019). Taxa were either placed as polytomies or halfway between existing nodes, depending on tree topologies.

### Species added with the reference used:

*Antinoria agrostidea* (Inda et al., 2008), *Bellis annua* (Brouillet et al., 2009), *Bromus rubens* (Fortune et al., 2008), *Bryonia cretica* (Volz and Renner, 2008), *Carex mairei* (Escudero et al., 2010), *Centaurea debeauxii* (López-Alvarado et al., 2014), *Crepis pурсifolia* (Enke and Gemeinholzer, 2008), *Helictotricon sempervirens* (Rodrigues et al., 2017), *Hypericum perforatum* (Meseguer et al., 2013), *Impatiens balsamina* (Janssens et al., 2006), *Potentilla montana* (Kechaykin and Shmakov, 2016), *Silene laeta* (Frajman et al., 2009), *Trifolium pallidum* (Ellison et al., 2006), *Verbena bonariensis* (Marx et al., 2010), *Vulpia muralis* (Inda et al., 2008).

### References for phylogeny manipulations:

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