**Appendix S1**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Species names | Origin | A | B | C | D | E | F |
| *Achillea millefolium* | Europe |  |  |  |  | 1980 | >1600 |
| *Aegopodium podagraria* | Eurasia | <1800 | X | X | <1700 | 1900 | >1600 |
| *Agrostis capillaris* | Europe | REG |  |  |  |  | >1600 |
| *Anthoxanthum odoratum* | Europe |  |  | X |  |  | >1900 |
| *Festuca pratensis* | Europe |  |  | X | <1700 | 1950 |  |
| *Phleum pratense ssp. pratense* | Eur., Sib., | <1800 | X | X | <1700 | 1990 | >1900 |
| *Picea abies* | Europe |  |  |  |  | 1950 | >1900 |
| *Plantago major* | Eurasia |  | X |  | <1700 | 1900 | >1600 |
| *Poa annua* | Europe |  | X | X | <1700 |  | >1600 |
| *Poa pratensis ssp. pratensis* | Europe |  | X |  | <1700 |  | >1900 |
| *Stellaria graminea* | Eurasia |  |  | X | 1871 |  |  |
| *Tanacetum vulgare* | Eurasia |  | X |  |  |  | >1900 |
| *Taraxacum officinale* | Europe |  | X |  | 1990 |  |  |
| *Trifolium pratense* | Europe |  | X |  | <1700 |  | >1600 |
| *Trifolium repens* | Europe |  | X | X | <1700 |  | >1600 |
| *Vicia cracca* | Circumpolar |  |  | X | 1770 |  |  |

A –[[37](#_ENREF_37)]. Norwegian Black List 2012. Species are treated as aliens if introduced in Norway by humans after 1800. However, an additional table is provided on species introduced by humans before this date.
B –[[36](#_ENREF_36)]. Norwegian Black List 2007. Species are treated as aliens if they are introduced in Norway by humans without any delimitation in time.
C – [[38](#_ENREF_38)] DAISIE. The European dataset on alien species.
D – [[39](#_ENREF_39)] Weidema et al. 2000 shows species introduced by humans in Norway, with a date of first introduction.
E – [[40](#_ENREF_40)] GBIF. A database with georeferenced species occurrence data over a period from before 1900 to now. Species patterns can be followed over years and the first recording in the northern third of Norway was marked. If a species was not found in the region before a certain time, it indicates that it was only introduced recently as alien. If occurrence data for northern Norway were already available from before 1900, no value is displayed in the table.
F – [[41](#_ENREF_41)] Expert advice from Torbjørn Alm, University of Tromsø, distinguishing two types of aliens: those that are introduced only recently in the northern part of Norway (> 1900) and those that were introduced by humans in the lowlands earlier (>1600), but that only started invading the mountains recently.