**Tabla S2.** Haploid chromosome number for species included in the study based on: Catalan *et al.,* 1997, 2004; Díaz-Pérez *et al*., 2014; Döring *et al*., 2007; Escobar *et al*., 2011; Essi *et al*., 2008; Fortune *et al*., 2008; Gillespie *et al*., 2005, 2008; Goldblatt & Johnson, 1979; Inda *et al*., 2013; Kellogg *et al*., 2015; Minaya *et al*., 2015; Peterson *et al*., 2006, Pimentel *et al*., 2013; Quintanar *et al*., 2007,2010; Saarela *et al*., 2010, 2015; Schneider *et al*., 2011, 2012; Soreng *et al*., 2007, 2010, 2015; Voshell *et al*., 2011; Watson & Dallwitz, 1992; Winterfeld *et al*., 2011, 2014. Hp., haploid.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Hp. chromosome number** | **Species** | **Hp. chromosome number** |
| *Aegilops geniculata* | 7 | *Festuca ovina* | 7 |
| *Agropyron cristatum* | 7 | *Festuca paniculata* | 7 |
| *Agrostis capillaris* | 7 | *Festuca plicata* | 7 |
| *Agrostis curtisii* | 7 | *Festuca pratensis* | 7 |
| *Agrostis stolonifera* | 7 | *Festuca rivularis* | 7 |
| *Aira cupaniana* | 7 | *Festuca rothmaleri* | 7 |
| *Airopsis tenella* | 4 | *Festuca rubra* | 7 |
| *Alopecurus arundinaceus* | 7 | *Festuca scariosa* | 7 |
| *Ammophila arenaria* | 14 | *Festuca simensis* | 7 |
| *Anthoxanthum aristatum* | 5 | *Festuca triflora* | 7 |
| *Antinoria agrostidea* | 7 | *Gaudinia fragilis* | 7 |
| *Arctagrostis latifolia* | 14 | *Hainardia cylindrica* | 13=0.5\_7=0.5 |
| *Arrhenatherum elatius* | 7 | *Helictotrichon filifolium* | 7 |
| *Avellinia michelii* | 7 | *Holcus lanatus* | 7 |
| *Avena barbata* | 7 | *Hordeum vulgare* | 7 |
| *Avena sterilis* | 7 | *Koeleria vallesiana* | 7 |
| *Avenula sulcata* | 7 | *Lagurus ovatus* | 7 |
| *Briza minor* | 5=0.5\_7=0.5 | *Lamarckia aurea* | 7 |
| *Bromus hordeaceus* | 7 | *Lolium canariense* | 7 |
| *Bromus ramosus* | 7 | *Lolium multiflorum* | 7 |
| *Bromus rubens* | 7 | *Lolium perenne* | 7 |
| *Bromus squarrosus* | 7 | *Lolium persicum* | 7 |
| *Bromus tectorum* | 7 | *Lolium remotum* | 7 |
| *Catabrosa aquatica* | 5 | *Lolium rigidum* | 7 |
| *Chaetopogon fasciculatus* | 7 | *Mibora minima* | 7 |
| *Corynephorus canescens* | 7 | *Micropyropsis tuberosa* | 7 |
| *Cutandia maritima* | 7 | *Micropyrum tenellum* | 7 |
| *Cynosurus cristatus* | 7 | *Molineriella laevis* | 4 |
| *Cynosurus\_echinatus* | 7 | *Narduroides salzmannii* | 7 |
| *Dactylis glomerata* | 7 | *Parapholis filiformis* | 7 |
| *Dactylis hispanica* | 7 | *Parapholis incurva* | 7=0.33\_9=0.34\_19=0.33 |
| *Dasypyrum villosum* | 7 | *Periballia involucrata* | 7=0.5\_4=0.5 |
| *Deschampsia cespitosa* | 7=0.5\_13=0.5 | *Phalaris canariensis* | 6=0.5\_7=0.5 |
| *Deschampsia flexuosa* | 7=0.5\_13=0.5 | *Phalaris coerulescens* | 7=0.5\_6=0.5 |
| *Desmazeria rigida* | 7 | *Phalaris minor* | 6=0.5\_7=0.5 |
| *Echinaria capitata* | 7=0.5\_9=0.5 | *Poa annua* | 7 |
| *Elymus sp* | 7 | *Poa bulbosa* | 7 |
| *Festuca abyssinica* | 7 | *Poa compressa* | 7 |
| *Festuca alpina* | 7 | *Poa infirma* | 7 |
| *Festuca ampla* | 7 | *Poa pratensis* | 7 |
| *Festuca arundinacea* | 7 | *Polypogon maritimus* | 7 |
| *Festuca borderei* | 7 | *Psilurus incurvus* | 7 |
| *Festuca capillifolia* | 7 | *Puccinellia distans* | 7 |
| *Festuca donax* | 7 | *Rostraria cristata* | 7 |
| *Festuca drymeja* | 7 | *Secale cereale* | 7 |
| *Festuca elegans* | 7 | *Sesleria albicans* | 7 |
| *Festuca eskia* | 7 | *Triplachne nitens* | 7 |
| *Festuca frigida* | 7 | *Triticum aestivum* | 7 |
| *Festuca gautieri* | 7 | *Vulpia alopecuros* | 7 |
| *Festuca gigantea* | 7 | *Vulpia bromoides* | 7 |
| *Festuca hystrix* | 7 | *Vulpia ciliata* | 7 |
| *Festuca iberica* | 7 | *Vulpia fasciculata* | 7 |
| *Festuca indigesta* | 7 | *Vulpia fontqueriana* | 7 |
| *Festuca lasto* | 7 | *Vulpia membranacea* | 7 |
| *Festuca longiauriculata* | 7 | *Vulpia muralis* | 7 |
| *Festuca mairei* | 7 | *Vulpia octoflora* | 7 |
| *Festuca modesta* | 7 | *Vulpia unilateralis* | 7 |
| *Festuca nevadensis* | 7 | *Wangenheimia lima* | 7 |

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