Supplementary Table S1. Dicot and monocot species modeled in the 98-paper data set.

|  |  |  |
| --- | --- | --- |
| **Scientific name** | **Common name** | **References** |
| Dicot species |
| *Abutilon theophrasti* | Velvetleaf | (Dorado et al. 2009; Egea-Cobrero et al. 2020; Forcella et al. 1997; Loddo et al. 2019; Masin et al. 2010, 2012, 2014; Myers et al. 2004; Webster et al. 1998; Werle et al. 2014b) |
| *Ageratum conyzoides* | Tropic ageratum | (Ekeleme et al. 2005) |
| *Amaranthus blitoides* | Prostrate pigweed | (Hadi and González-Andújar 2009) |
| *Amaranthus hybridus* | Smooth pigweed | (Myers et al. 2004; Tiwari et al. 2021) |
| *Amaranthus palmeri* | Palmer amaranth | (Chahal et al. 2021; Reinhardt Piskackova et al. 2021) |
| *Amaranthus retroflexus* | Redroot pigweed | (Bullied et al. 2003; Hadi and González-Andújar 2009; Werle et al. 2014b) |
| *Amaranthus rudis* | Common waterhemp | (Werle et al. 2014b) |
| *Amaranthus* spp. | Pigweed spp. | (Forcella et al. 1997; Oryokot et al. 1997; Otto et al. 2007) |
| *Ambrosia artemisiifolia* | Common ragweed | (Barnes et al. 2017; Forcella et al. 1997; Myers et al. 2004; Werle et al. 2014b) |
| *Ambrosia trifida* | Giant ragweed | (Davis et al. 2013; Goplen et al. 2017, 2018; Harrison et al. 2007; Schutte et al. 2008; Werle et al. 2014b) |
| *Apocynum cannabinum* | Hemp dogbane | (Webster and Cardina 1999) |
| *Bassia scoparia* | Kochia | (Dille et al. 2017; Forcella et al. 1997; Schwinghamer and Acker 2008; Werle et al. 2014b) |
| *Brassica napus* | Canola | (Bullied et al. 2003; Lawson et al. 2006; Soltani et al. 2018) |
| *Camelina microcarpa* | Littlepod false flax | (Royo-Esnal et al. 2015b) |
| *Capsella bursa-pastoris* | Shepherd’s purse | (Grundy and Mead 2000; Hill et al. 2014; Otto et al. 2007; Werle et al. 2014a) |
| *Centaurea diluta* | North African knapweed | (Sousa-Ortega et al. 2020b) |
| *Chenopodium album* | Common lambsquarters | (Bullied et al. 2003; Forcella et al. 1997; Grundy and Mead 2000; Leblanc et al. 2003, 2004; Masin et al. 2012, 2014; Myers et al. 2004; Otto et al. 2007; Roman et al. 1999, 2000; Vleeshouwers and Kropff 2000; Werle et al. 2014b) |
| *Cirsium arvense* | Canada thistle | (Donald 2000) |
| *Datura ferox* | Long-spine thorn-apple | (Dorado et al. 2009) |
| *Datura stramonium* | Jimsonweed | (Dorado et al. 2009; Werle et al. 2014b) |
| *Descurainia pinnata* | Pinnate tansymustard | (Werle et al. 2014a) |
| *Descurainia sophia* | Flixweed | (Aboutalebian et al. 2017) |
| *Erigeron bonariensis* | Hairy fleabane | (Zambrano-Navea et al. 2013) |
| *Fallopia convolvulus* | Wild buckwheat | (Bullied et al. 2003; Forcella et al. 1997; Otto et al. 2007) |
| *Galinsoga parviflora* | Gallant soldier | (Otto et al. 2007) |
| *Galinsoga quadriradiata* | Hairy galinsoga | (Otto et al. 2007) |
| *Galium aparine* | Catchweed bedstraw | (Royo-Esnal et al. 2010) |
| *Galium spurium* | False cleavers | (Royo-Esnal et al. 2010) |
| *Galium tricornutum* | Three-horn bedstraw | (Royo-Esnal et al. 2010) |
| *Helianthus annuus* | Common sunflower | (Clay et al. 2014; Forcella et al. 1997; Werle et al. 2014b) |
| *Hibiscus trionum* | Venice mallow | (Werle et al. 2014b) |
| *Ipomoea hederacea* | Ivyleaf morningglory | (Werle et al. 2014b) |
| *Ipomoea purpurea* | Tall morningglory | (Hadi and González-Andújar 2009) |
| *Lamium amplexicaule* | Henbit | (Hill et al. 2014; Tiwari et al. 2021; Werle et al. 2014a) |
| *Lamium purpureum* | Purple deadnettle | (Otto et al. 2007) |
| *Lepidium virginicum* | Virginia pepperweed | (Werle et al. 2014a) |
| *Linum usitatissimum* | Flax | (Dexter et al. 2010) |
| *Lipandra polysperma* | Manyseed goosefoot | (Otto et al. 2007) |
| *Medicago lupulina* | Black medic | (Sharpe and Boyd 2019) |
| *Oenothera laciniata* | Cutleaf evening primrose | (Tiwari et al. 2021) |
| *Papaver rhoeas* | Corn poppy | (Izquierdo et al. 2009) |
| *Persicaria maculosa* | Ladysthumb | (Vleeshouwers and Kropff 2000) |
| *Polygonum aviculare* | Prostrate knotweed | (Forcella et al. 1997; Otto et al. 2007; Royo-Esnal et al. 2015a; Yousefi et al. 2014) |
| *Polygonum pensylvanicum* | Pennsylvania smartweed | (Forcella et al. 1997; Werle et al. 2014b) |
| *Portulaca oleracea* | Common purslane | (Forcella et al. 1997; Khakzad et al. 2019) |
| *Raphanus raphanistrum* | Wild radish | (Reinhardt Piskackova et al. 2020a, 2020b) |
| *Rumex acetosella* | Red sorrel | (White et al. 2015) |
| *Senecio vulgaris* | Common groundsel | (McGiffen et al. 2008) |
| *Senna obtusifolia* | Sicklepod | (Reinhardt Piskackova et al. 2020a, 2020c; Tiwari et al. 2021) |
| *Sicyos angulatus* | Burcucumber | (Werle et al. 2014b) |
| *Sinapis arvensis* | Wild mustard | (Bullied et al. 2003) |
| *Solanum nigrum* | Black nightshade | (Dorado et al. 2009) |
| *Solanum ptychanthum* | Eastern black nightshade | (Myers et al. 2004; Werle et al. 2014b) |
| *Solanum sarrachoides* | Hairy nightshade | (Forcella et al. 1997) |
| *Sonchus oleraceus* | Common sowthistle | (Dorado et al. 2009; Otto et al. 2007) |
| *Spergula arvensis* | Corn spurry | (Vleeshouwers and Kropff 2000) |
| *Stellaria media* | Common chickweed | (Grundy et al. 2003; Grundy and Mead 2000; Hill et al. 2014; Otto et al. 2007; Tiwari et al. 2021) |
| *Taraxacum officinale* | Dandelion | (Hacault and Van Acker 2006; Werle et al. 2014a) |
| *Thlaspi arvense* | Field pennycress | (Bullied et al. 2003; Hill et al. 2014; Royo-Esnal et al. 2015c; Werle et al. 2014a) |
| *Tripleurospermum inodorum* | Scentless chamomile | (Grundy and Mead 2000) |
| *Veronica hederifolia* | Ivyleaf speedwell | (Grundy and Mead 2000) |
| *Veronica peregrina* | Purslane speedwell | (Werle et al. 2014a) |
| *Veronica persica* | Persian speedwell | (Otto et al. 2007) |
| *Vicia villosa* | Hairy vetch | (Chantre et al. 2018; Renzi et al. 2018) |
| *Viola rafinesquei* | Field pansy | (Werle et al. 2014a) |
| *Xanthium strumarium* | Common cocklebur | (Dorado et al. 2009; Norsworthy and Oliveira 2007; Werle et al. 2014b) |
| Monocot species |  |  |
| *Agropyron desertorum* | Wheatgrass | (Behtari and Luis 2012) |
| *Alopecurus carolinianus* | Carolina foxtail | (Werle et al. 2014a) |
| *Alopecurus myosuroides* | Blackgrass | (Colbach et al. 2006) |
| *Avena fatua* | Wild oat | (Aboutalebian et al. 2017; Blanco et al. 2014; Bullied et al. 2003; Chantre et al. 2012, 2014, 2018; Martinson et al. 2007; Page et al. 2006; Yousefi et al. 2014) |
| *Avena sterilis* | Sterile oat | (Hadi and González-Andújar 2009; Leguizamón et al. 2005; Sousa-Ortega et al. 2021a) |
| *Bromus diandrus* | Ripgut brome | (Cao et al. 2011, 2013; García et al. 2013; Recasens et al. 2016) |
| *Bromus* spp. | Brome spp. | (Hadi and González-Andújar 2009) |
| *Bromus tectorum* | Downy brome | (Werle et al. 2014a) |
| *Cenchrus spinifex* | Field sandbur | (Werle et al. 2014b) |
| *Chloris virgata* | Feather fingergrass | (Rodriguez et al. 2020) |
| *Cyperus difformis* | Smallflower umbrella sedge | (Lundy et al. 2014) |
| *Cyperus rotundus* | Purple nutsedge | (Dorado et al. 2009) |
| *Digitaria ischaemum* | Smooth crabgrass | (Cardina et al. 2011; Turner and Van Acker 2013) |
| *Digitaria sanguinalis* | Large crabgrass | (Cardina et al. 2011; Dorado et al. 2009; Leguizamón et al. 2009; Masin et al. 2005, 2014; Myers et al. 2004; Turner and Van Acker 2013) |
| *Echinochloa colonum* | Junglerice | (Leguizamón et al. 2009; Picapietra et al. 2021) |
| *Echinochloa crus-galli* | Barnyardgrass | (Bagavathiannan et al. 2011; Dorado et al. 2009; Masin et al. 2014; Werle et al. 2014b) |
| *Echinochloa* spp. |  | (Goulart et al. 2020; Lundy et al. 2014) |
| *Eleusine indica* | Goosegrass | (Leguizamón et al. 2009; Masin et al. 2005) |
| *Eriochloa villosa* | Woolly cupgrass | (Werle et al. 2014b) |
| *Festuca arundinacea* | Tall fescue | (Behtari and Luis 2012) |
| *Imperata cylindrica* | Cogongrass | (Ekeleme et al. 2004) |
| *Lolium multiflorum* | Italian ryegrass | (Chantre et al. 2018; Pagnoncelli et al. 2021) |
| *Lolium rigidum* | Rigid ryegrass | (Hadi and González-Andújar 2009; Izquierdo et al. 2013; Sousa-Ortega et al. 2020a) |
| *Oryza sativa* | Red rice | (Shivrain et al. 2009) |
| *Panicum miliaceum* | Wild proso millet | (Forcella et al. 1997) |
| *Phalaris brachystachys* | Short-spike canarygrass | (Bastida et al. 2021; Sousa-Ortega et al. 2021b) |
| *Phalaris minor* | Lesser canarygrass | (Sousa-Ortega et al. 2021b) |
| *Phalaris paradoxa* | Awned canarygrass | (González-Andújar et al. 2016; Sousa-Ortega et al. 2021b) |
| *Poa annua* | Annual bluegrass | (Masin and Macolino 2016; Shem-Tov and Fennimore 2003) |
| *Rottboellia cochinchinensis* | Itchgrass | (Leon et al. 2015) |
| *Setaria faberi* | Giant foxtail | (Cardina et al. 2007; Forcella et al. 1997; Myers et al. 2004; Werle et al. 2014b) |
| *Setaria parviflora* | Knotroot foxtail | (Leguizamón et al. 2009) |
| *Setaria pumila* | Yellow foxtail | (Forcella et al. 1997; Masin et al. 2005; Myers et al. 2004; Werle et al. 2014b) |
| *Setaria viridis* | Green foxtail | (Bullied et al. 2003; Forcella et al. 1997; Masin et al. 2005; Werle et al. 2014b) |
| *Sorghum bicolor* | Shattercane | (Werle et al. 2014b) |
| *Sorghum halepense* | Johnsongrass | (Dorado et al. 2009; Leguizamón et al. 2009; Masin et al. 2010, 2012, 2014) |
| *Triticum aestivum* | Wheat | (Bullied et al. 2012) |
| *Urochloa panicoides* | Liverseed grass | (Ustarroz et al. 2016) |
| *Urochloa platyphylla* | Broadleaf signalgrass | (Leguizamón et al. 2009) |
| Entire community |  |  |
| NA | NA | (Amador-Ramirez et al. 2002) |

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