Table S1. Information on the five invasive and five native herbaceous species seeds used to determine the potential allelopathic effects of aqueous plant leachates on germination.

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| --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Family** | **Number of** **Chinese** **regions** | **Status in eastern China (year of first record)** | **Region of origin** | **Life cycle** | **Seed source** |
| *Sesbania cannabina* (Retz.) Poir. | Fabaceae | 26 | Alien-1 (1910) | Indian Subcontinent to Indo-China, Australia | Annual | Junjie Nursery Stock Company (Jiangsu,Suqian)  |
| *Amaranthus spinosus* L. | Amaranthaceae | 25 | Alien-1 (1905) | Mexico to Tropical America | Annual | Jiangsu Qixiu Seed Industry Co., Ltd (Jiangsu,Suqian)  |
| *Lolium perenne*L. | Poaceae | 32 | Alien-4 (1905) | Europe | Perennial | Jiangsu Daxin Ecological Technology Co., Ltd (Jiangsu,Suqian)  |
| *Capsella bursa-pastoris* (L.) Medik. | Brassicaceae | 34 | Alien-4 (1906) | Europe, and parts of Asia and Africa | Annual | Field in Taizhou |
| *Sphagneticola trilobata* (L.) Pruski | Asteraceae | 5 | Alien-1 (1997) | Mexico to S. Tropical America and Trinidad | Perennial | Junjie Nursery Stock Company (Jiangsu, Suqian ) |
| *Achyranthes bidentata* Blume | Amaranthaceae | 14 | Native | Eastern and Tropical Asia  | Perennial  | Thousand Green Seed Company (Jjiangsu,Suqian) |
| *Crepidiastrum sonchifolium* (Maxim.) Pak & Kawano | Asteraceae | 19 | Native | Eastern Asia | Annual/biennial | Thousand Green Seed Company (Jjiangsu,Suqian) |
| *Orychophragmus violaceus* (L.) O.E.Schul | Brassicaceae | 15 | Native | N.&E. China to N. Korea | Annual/biennial | Jiangsu huazhiyin seed industry (Jiangsu,Suqian)  |
| *Arthraxon hispidus* (Thunb.) Makino | Poaceae | 20 | Native | Tropical Africa, W. Indian Ocean,Asia to E. Australia | Annual | Field in Taizhou |
| *Aeschynomene indica* L. | Fabaceae | 21 | Native | Tropical & Subtropical old world | Annual | Thousand Green Seed Company (Jjiangsu,Suqian) |
|  |  |  |  |  |  |  |

Information on the number of Chinese regions (*n* = 34) in which a species occurs is adopted from Yan et al. (2019) for alien species, and is adopted from *Flora of China* (<http://www.efloras.org/flora_page.aspx?flora_id=2>) for native species. Information on the alien status and its invasiveness grade in China is achieved from Yan et al. (2014): Alien-1 = malignant invasive plant (i.e. alien species having significant and serious impact on the economy or environment), Alien-4 = alien plant that is common but does not have obvious impacts). Information on the year of first record of alien species is adopted from the Chinese Virtual Herbarium (<https://www.cvh.ac.cn/>). Information on the region of origin is from POWO (2019). Information on life cycle is obtained from the Flora of China.

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