

TERMS OF SUCCESSFUL ESTABLISHMENT OF HORTICULTURAL PRAIRIE PLANTINGS IN BERLIN, GERMANY

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Abstract: Horticultural prairie plantings have been of increasing interest in the German field of planting design for over a decade. The longevity, draught-tolerance and out of the ordinary appearance of a variety of prairie species is of particular use for developing mixed plantings, which are known for their cost-effective establishment and maintenance. In 2009 the German Research Foundation granted a research project concerned with the investigation of factors accounting for and favouring the successful establishment of mixed prairie plantings in Berlin, Germany. Varied diversities of species (32, 16 and 8 species per mix), grass-forb ratios (80:20, 50:50, 20:80), management systems (mowing in spring, mowing and burning in spring, mowing and burning in spring plus selective weeding during summer months) and substrate types (top soil, top soil with 3 inches 5/11 graywacke mulch layer) are tested in a split-plot design [A/B+C]/D-B1 on an intra-urban site on sandy loam. The experiment aims at a total runtime of seven years in order to additionally investigate factors of exclusion via competition, sustainable reproduction and potential invasiveness of the introduced species. The experiment was initiated in September 2009 with last preparations taking place in July 2010.