This file contains estimated seed set (fecundity) data on 773 individuals of six focal annual plant species common to the York Gum woodlands in SW Western Australia. Seed set per focal plant was estimated for each plant by counting up the total number of flowers (or inflorescences) on each plant and multiplying that number by the average number of seeds produced per flower(infor.) using 1-3 flowers(inflor.) per plant. In addition to seed production values, this dataset also includes the identity and abundance of all plants within a 7.5 cm radius around each focal plant. More details are available in the readme file and in the methods of the paper associated with this dataset.