

## Supporting information:

# Recipient and donor characteristics govern hierarchical structure in a heterospecific pollen competition network of co-flowering plants

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The following Supporting Information is available for this article:

**Table S1.** Species names, common names, varieties and sources of the different seeds.

**Table S2.** Numerical values of all the traits measured for each species.

**Table S3.** Seed set in percentage for hand cross-pollination, hand self-pollination, natural selfing and apomixis for all species.

**Table S4.** Species x species matrix with the significance of effect “yes” or “no” of the different donors on the seed set of the different recipient species.

**Table S5.** Estimates, standard error, t-value and P-value of the effect of the different 9 donors on each recipient species.

**Table S6.** Number of seeds produced with 100% foreign pollen treatments for the different recipient species.

**Table S7.** Phylogenetic signal and significance for all the different traits

**Table S8.** Procrustes analysis results.

**Figure S1.** Correlation matrix for all the different traits.

**Figure S2.** Total amount of pollen found for the different treatments.

**Figure S3.** Pollen ratios for the different recipient species.

**Figure S4.** Pollen ratios for the different recipient species by family.

**Figure S5.** Statistical comparison of pollen ratios by family as pollen donor and recipient.

**Figure S6.** Violin plot of the reproductive biology of the species.

**Figure S7.** Grouped effect sizes by family for each recipient species.

Species	Common_names	Variety	Source
Brassica oleracea	Wild cabbage	Capitata	<a href="https://www.mrfothergills.com.au/">https://www.mrfothergills.com.au/</a>
Brassica rapa	Pak choi	Chinensis	<a href="https://www.mrfothergills.com.au/">https://www.mrfothergills.com.au/</a>
Eruca sativa	Rocket		<a href="https://www.mrfothergills.com.au/">https://www.mrfothergills.com.au/</a>
Sinapis alba	White mustard		<a href="https://www.mrfothergills.com.au/">https://www.mrfothergills.com.au/</a>
Ipomoea aquatica	Water spinach		<a href="https://www.theseedcollection.com.au/">https://www.theseedcollection.com.au/</a>
Ipomoea purpurea	Morning glory		<a href="http://www.shaman-australis.com.au">http://www.shaman-australis.com.au</a>
Capsicum annum	Capsicum	California Wonder	<a href="https://www.edenseeds.com.au">https://www.edenseeds.com.au</a>
Petunia integrifolia	Petunia		<a href="https://www.dianeseeds.com/">https://www.dianeseeds.com/</a>
Solanum lycopersicum	Tomato	Tommy Toe	<a href="https://www.mrfothergills.com.au/">https://www.mrfothergills.com.au/</a>
Solanum melongena	Eggplant	Little Fingers	<a href="https://www.4seasonsseeds.com.au/">https://www.4seasonsseeds.com.au/</a>