## Table 1

Family	Genus	Species	
Brassicaceae	Brassica	Brassica rapa	
Brassicaceae	Brassica	Brassica oleracea	
Brassicaceae	Eruca	Eruca versicaria	
Brassicaceae	Sinapis	Sinapis alba	
Convolvulaceae	Ipomoea	Ipomoea aquatica	
Convolvulaceae	Ipomoea	Ipomoea purpurea	
Solanaceae	Capsicum	Capsicum annuum	
Solanaceae	Petunia	Petunia integrifolia	
Solanaceae	Solanum	Solanum lycopersicum	
Solanaceae	Solanum	Solanum melongena	

Family	Species	Donor	Seeds
Brassicaceae	B. oleracea	C. annuum	5
Brassicaceae	B. rapa	B. oleracea	2
Brassicaceae	B. rapa	B. oleracea	13
Brassicaceae	B. rapa	S. lycopersicum	1
Brassicaceae	B. rapa	B. oleracea	7
Brassicaceae	B. rapa	B. oleracea	5
Brassicaceae	S. alba	B. oleracea	7
Brassicaceae	E. sativa	C. annuum	6
Brassicaceae	E. sativa	C. annuum	1
Solanaceae	S. lycopersicum	S. alba	3
Solanaceae	S. melongena	P. integrifolia	36
Solanaceae	C. annuum	S. alba	127
Solanaceae	C. annuum	E. sativa	3

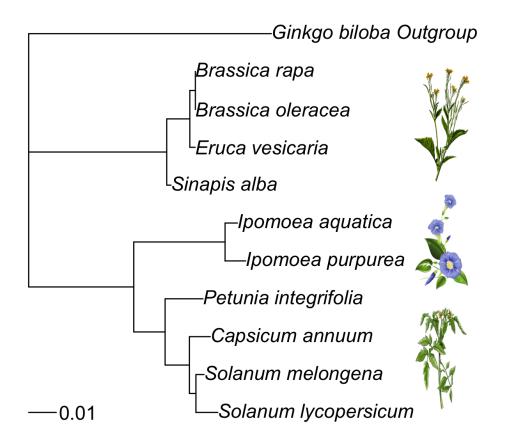


Figure 1

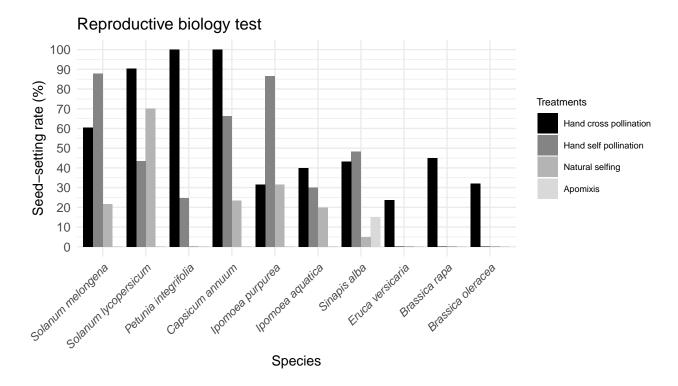


Figure 2

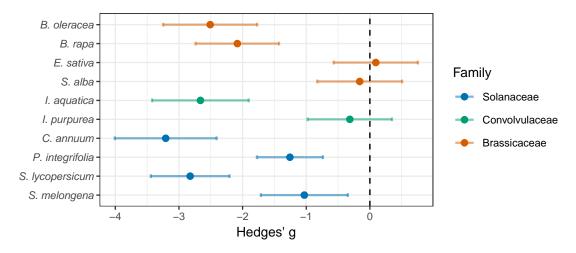


Figure 3

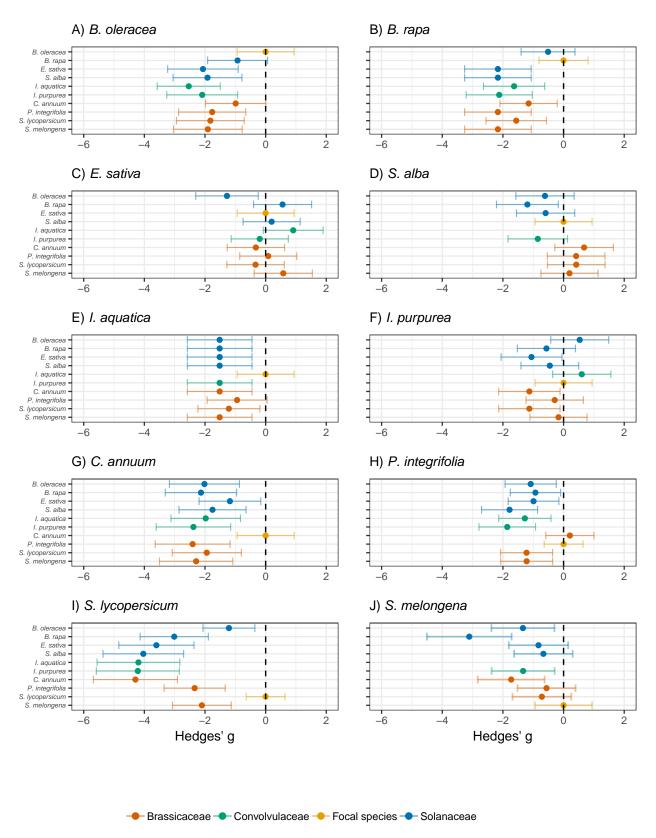


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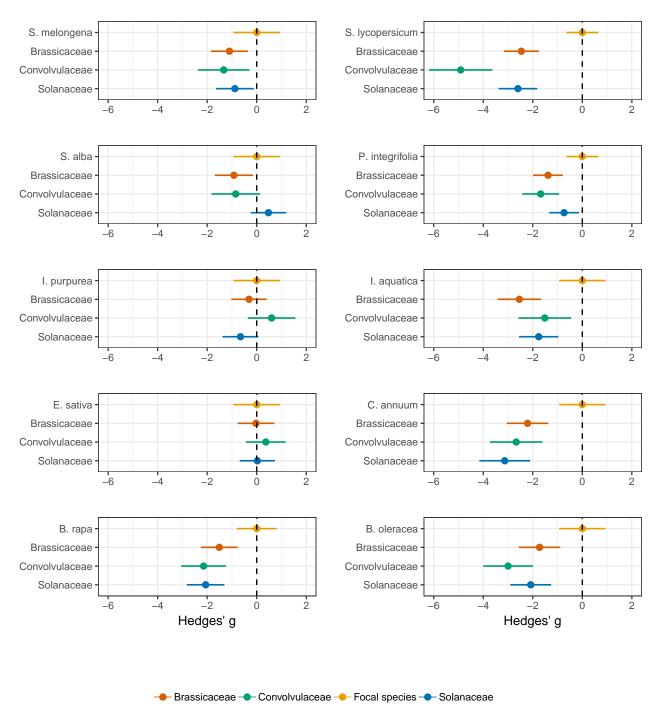


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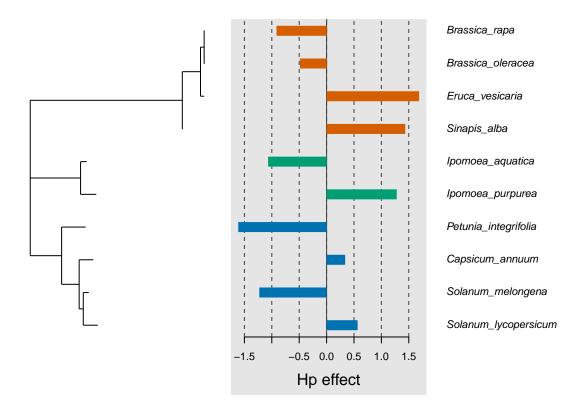


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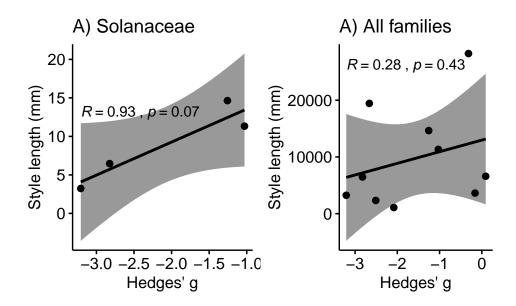
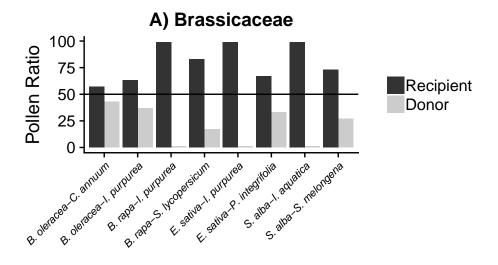
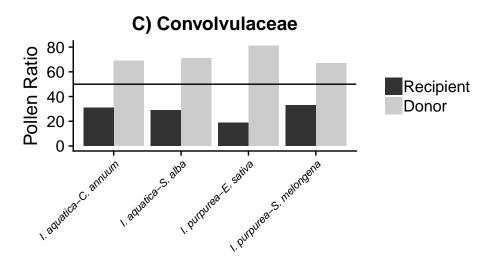


Figure 7





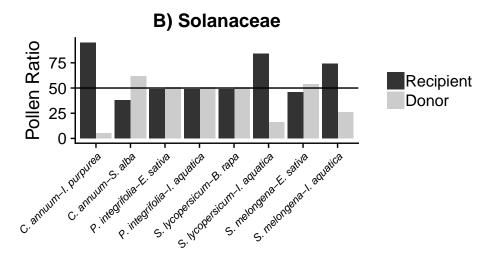
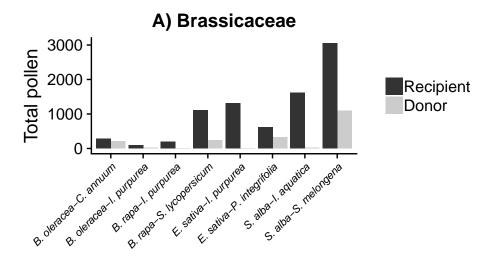
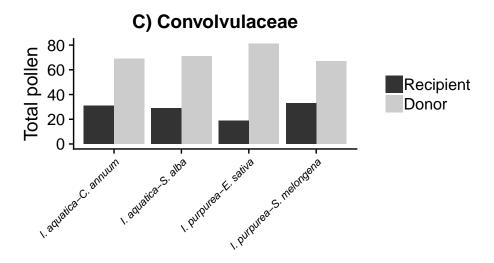


Figure 8





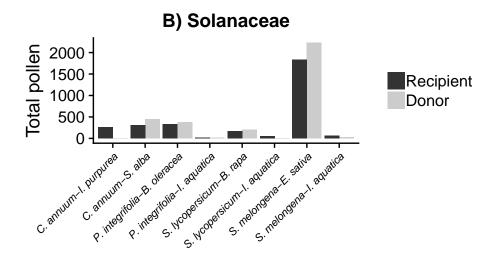


Figure 9

## List of tables

Table 1 Species list with family and genus.

## List of figures

**Figure 1** Phylogenetic tree of the species used in the experiment from three different families from top to bottom: Brassicaceae, Convolvulaceae and Solanaceae.

Figure 2 Barplot of the different tests of the reproductive biology of the species. The y axis is the percentage of ovules converted to seed. The different treatments are, hand cross-pollination, hand self-pollination, natural selfing and apomixis (N=10 for all of them).

**Figure 3** The impact of foreign pollen on recipient plant species. Effect sizes (with 95% confidence intervals) of 9 different donor species of heterospecific pollen upon all recipients.

**Figure 4** The response of heterospecific pollen upon 10 recipient plant species. Each panel represents one recipient plant species crossed with 50% mixes of the other 9 species.

## Figure 5

Figure 6 Phylogenetic signal of hterospecific pollen effect (hedges' g)

Figure 7 (comment) Simple Pearson correlation in order to show a possible path to follow in the article showing that style length and stigma size could explain the effect in Solanaceae species.

**Figure 8** Pollen ratio counts on stigma after hand pollination with 50-50% mix. The panel is divided by family: A) Brassicaceae, B) Convolvulaceae and C) Solanaceae. The pollen recipient species is coloured in black and the donor species in grey.

**Figure 9** Total pollen counts on stigma after hand pollination with 50-50% mix. The panel is divided by family: A) Brassicaceae, B) Convolvulaceae and C) Solanaceae. The pollen recipient species is coloured in black and the donor species in grey.