

Table S3. The list of orthologous gene families in the two studied ecotypes of *B. fecunda* and the other 15 plant species.

Category	AT	BR	BS	CH	CC	CG	CP	CR	ES	GM	MT	OA	PT	SB	TP	BFQH	BFSP
Number of genes	27416	40492	27416	37997	24533	24805	27751	26521	26351	56044	50894	42189	41335	34211	27132	28501	27342
Number of genes in orthogroups	25833	38258	26427	35130	21927	24474	19979	25890	25271	46697	33886	26946	33495	25664	24390	25493	25413
Number of unassigned genes	1583	2234	989	2867	2606	331	7772	631	1080	9347	17008	15243	7840	8547	2742	3008	1929
Percentage of genes in orthogroups	94.2	94.5	96.4	92.5	89.4	98.7	72	97.6	95.9	83.3	66.6	63.9	81	75	89.9	89.4	92.9
Percentage of unassigned genes	5.8	5.5	3.6	7.5	10.6	1.3	28	2.4	4.1	16.7	33.4	36.1	19	25	10.1	10.6	7.1
Number of species-specific orthogroups	4	8	5	19	24	1	29	3	6	87	133	78	64	45	40	4	9

AT: *Arabidopsis thaliana*; BR: *Brassica rapa*; BS: *Boechera stricta*; CH: *Cardamine hirsute*; CC: *Citrus clementina*; CG: *Capsella grandiflora*; CP: *Carica papaya*; CR: *Capsella rubella*; ES: *Eutrema salsugineum*; GM: *Glycine max*; MT: *Medicago truncatula*; OS: *Oryza sativa*; PT: *Populus trichocarpa*; SB: *Sorghum bicolor*; TP: *Thellungiella parvula*; BFQH: *Boechera fecunda* QH ecotype; BFSP: *Boechera fecunda* SP ecotype.