

Supplemental Table 2. List of mitochondrial and chloroplast sequences used for data filtering.

Mitochondrial reads	Chloroplast reads
Brassica napus mitochondrial linear plasmid, complete sequence	Arabidopsis thaliana chloroplast, complete genome
Brassica napus mitochondrion, complete genome	Aethionema cordifolium chloroplast, complete genome
Carica papaya mitochondrion, complete genome	Aethionema grandiflorum chloroplast, complete genome
Brassica oleracea mitochondrion, complete genome	Olimarabidopsis pumila chloroplast, complete genome
Brassica carinata mitochondrion, complete genome	Arabis hirsuta chloroplast, complete genome
Brassica juncea mitochondrion, complete genome	Barbarea verna chloroplast, complete genome
Brassica rapa subsp. campestris mitochondrion, complete genome	Capsella bursa-pastoris chloroplast, complete genome
Raphanus sativus mitochondrion, complete genome	Crucihimalaya wallichii chloroplast, complete genome
Batis maritima mitochondrion, complete genome	Draba nemorosa chloroplast, complete genome
Brassica nigra mitochondrion, complete genome	Lepidium virginicum chloroplast, complete genome
Sinapis arvensis mitochondrion, complete genome	Lobularia maritima chloroplast, complete genome
Arabis alpina mitochondrion, complete genome	Nasturtium officinale chloroplast, complete genome
Arabidopsis thaliana ecotype Col-0 mitochondrion, complete genome	Carica papaya chloroplast, complete genome
Boechera stricta mitochondrion, complete genome	Brassica rapa subsp. pekinensis chloroplast, complete genome
	Brassica napus chloroplast, complete genome
	Pachycladon enysii chloroplast, complete genome
	Pachycladon cheesemanii chloroplast, complete genome
	Arabis alpina complete chloroplast genome
	Raphanus sativus chloroplast, complete genome
	Capsella rubella chloroplast, complete genome
	Eutrema salsugineum chloroplast, complete genome
	Brassica juncea chloroplast, complete genome
	Isatis tinctoria voucher cp-824 chloroplast, complete genome
	Capsella grandiflora chloroplast, complete genome
	Schrenkiella parvula chloroplast, complete genome
	Eutrema yunnanense chloroplast, complete genome
	Eutrema heterophyllum chloroplast, complete genome
	Cochlearia borzaeana chloroplast genome, complete sequence, isolate Cbor_1063
	Cochlearia islandica chloroplast genome, complete sequence, isolate Csla_1233
	Cochlearia pyrenaica chloroplast genome, complete sequence, isolate Cpyr_0260
	Cochlearia tridactylites chloroplast genome, complete sequence, isolate Ctri_1288
	Ionopsidium acaule chloroplast genome, complete sequence, isolate Iacau_1072
	Arabidopsis arenosa chloroplast genome, complete sequence, specimen voucher PUSTE-A
	Arabidopsis cebennensis chloroplast genome, complete sequence, specimen voucher 138R-17
	Arabidopsis pedemontana chloroplast genome, complete sequence, specimen voucher 114R-03
	Camelina sativa chloroplast genome, complete sequence, specimen voucher B-2007-0434-12
	Eutrema halophilum chloroplast, complete genome
	Eutrema botschantzevii chloroplast, complete genome
	Arabidopsis arenicola chloroplast genome, complete sequence, isolate 2329
	Arabidopsis croatica chloroplast genome, complete sequence, isolate ACR

	Arabidopsis neglecta chloroplast genome, complete sequence, isolate AA095-F
	Arabidopsis petrogena chloroplast genome, complete sequence, isolate SK08-h
	Arabidopsis suecica chloroplast genome, complete sequence, isolate AS459
	Arabidopsis umezawana chloroplast genome, complete sequence, isolate 504865
	Brassica nigra chloroplast, complete genome
	Pugionium dolabratum chloroplast, complete genome
	Pugionium cornutum chloroplast, complete genome
	Cakile arabica chloroplast, complete genome
	Orychophragmus diffusus chloroplast, complete genome
	Orychophragmus taibaiensis chloroplast, complete genome
	Orychophragmus hupehensis chloroplast, complete genome
	Alliaria grandifolia chloroplast, complete genome
	Cardamine limprichtiana chloroplast, complete genome
	Alyssum desertorum voucher ADES20160707 chloroplast, complete genome
	Megadenia pygmaea chloroplast, complete genome
	Matthiola incana chloroplast, complete genome
	Solms-laubachia eurycarpa chloroplast, complete genome
	Megacarpaea delavayi chloroplast, complete genome
	Neotorularia korolkowii chloroplast, complete genome
	Thlaspi arvense chloroplast, complete genome
	Lepidium meyenii chloroplast, complete genome
	Tarenaya hassleriana chloroplast, complete genome
	Arabidopsis lyrata chloroplast, complete genome
	Arabidopsis halleri chloroplast, complete genome
	Aethionema arabicum chloroplast, complete genome
	Arabidopsis lyrata subsp. lyrata chloroplast DNA, complete genome, strain: MN47
	Sinapis arvensis chloroplast, complete genome
	Hesperis matronalis chloroplast, complete genome
	Hesperis sylvestris chloroplast, complete genome
	Lobularia libyca chloroplast, complete genome
	Morettia canescens chloroplast, complete genome
	Braya humilis chloroplast, complete genome
	Bunias erucago chloroplast genome, complete sequence, specimen voucher OSBU:12478
	Bunias orientalis chloroplast genome, complete sequence, specimen voucher RO12
	Arabis flagellosa Kifune chloroplast DNA, complete genome
	Bretschneidera sinensis chloroplast, complete genome
	Draba oreades chloroplast, complete genome
	Sisymbrium irio chloroplast J04 DNA, complete genome
	Biscutella baetica isolate Bba1 chloroplast, complete genome
	Biscutella lyrata isolate Bly2 chloroplast, complete genome
	Heldreichia bupleurifolia isolate Hbu3 chloroplast, complete genome
	Lunaria rediviva isolate Lre4 chloroplast, complete genome
	Ricotia aucheri isolate Rau5 chloroplast, complete genome

	Ricotia carnosula isolate Rca6 chloroplast, complete genome
	Ricotia cretica isolate Rcr7 chloroplast, complete genome
	Ricotia davisiana isolate Rda8 chloroplast, complete genome
	Ricotia isatoides isolate Ris9 chloroplast, complete genome
	Ricotia lunaria isolate Rlu10 chloroplast, complete genome
	Brassica rapa isolate c13 chloroplast, complete genome
	Brassica oleracea isolate HDEM chloroplast, complete genome
	Moringa oleifera chloroplast, complete genome