Supplementary Table S2. GenBank/RefSeq accessions of the sequences used in the phylogenetic analysis.

M. himalaica study proteins (marked "this study") are the queries; all others are homologs retrieved from GenBank/RefSeq.

Arogenate dehydrogenase (ADH)

Label	Accession	Organism
MhADH	PZ746414 (this study)	*Mirabilis himalaica*
MjADH	AMR60658	*Mirabilis jalapa*
RhADHa	AST12939	*Rivina humilis*
PoADHa	AST12940	*Portulaca oleracea*
SoADHa	AST12938	*Spinacia oleracea*
BvADHa	AST12931	*Beta vulgaris*
NvADHb	AST12937	*Nepenthes ventricosa* × *N. alata*
SoADHb	AST12936	*Spinacia oleracea*
BvADHb	AST12926	*Beta vulgaris*

Cytochrome P450 CYP76AD

Label	Accession	Organism
MhCYP76AD1	PZ746415 (this study)	*Mirabilis himalaica*
AcCYP76AD2	AET43291	*Amaranthus cruentus*
AcCYP76AD1-like	AKI33932	*Amaranthus cruentus*
CcCYP76AD4	AGI78466	*Celosia cristata*
BvCYP76AD1	AQS22859	*Beta vulgaris* subsp. *cicla*
CqCYP76AD1	XP_021769302	*Chenopodium quinoa*
CbCYP76AD12	AJD87468	*Cleretum bellidiforme*
MjCYP76AD3	AET43292	*Mirabilis jalapa*
PaCYP76AD11	AJD87467	*Phytolacca americana*
OfCYP76AD8	AJD87464	*Opuntia ficus-indica*
BaCYP76AD14	AJD87470	*Basella alba*
DcCYP76AD19	AMA07825	*Dianthus caryophyllus*
MjCYP76AD15	AJD87471	*Mirabilis jalapa*
BvCYP76AD5	AJD87473	*Beta vulgaris*
BvCYP76AD6	ALS88208	*Beta vulgaris*
MvCYP76AD17	AMA07822	*Mollugo verticillata*
MjCYP76	ALT04745	*Mirabilis jalapa*
BaCYP76AD13	AJD87469	*Basella alba*
MjCYP76AD7	AJD87463	*Mirabilis jalapa*
CbCYP76AD16	AJD87472	*Cleretum bellidiforme*
MvCYP76F84	AMA07823	*Mollugo verticillata*

L-DOPA 4,5-dioxygenase (DODA)

Label	Accession	Organism
MhSDODA	PZ746418 (this study)	*Mirabilis himalaica*
MhDODA1	PZ746416 (this study)	*Mirabilis himalaica*
MhDODA2	PZ746417 (this study)	*Mirabilis himalaica*
MjDODA1	AB435372	*Mirabilis jalapa*
MjDODA2	KM502866	*Mirabilis jalapa*
BgDOD1	ASW22755	*Bougainvillea glabra*
BgDOD2	AB435373	*Bougainvillea glabra*
PaDODA1	AB451869	*Phytolacca americana*
PaDODA2	AB451870	*Phytolacca americana*
AtrDOD	AJW81119	*Amaranthus tricolor*
SoDODA1a	XM_021991321	*Spinacia oleracea*
SoDODA1b	XP_021836119	*Spinacia oleracea*
BvDODAa1A	HQ656027	*Beta vulgaris*
BvDODAa1B	AET43293	*Beta vulgaris*
PgDODA	AJ580598	*Portulaca grandiflora*
MvDODA	AKI33653	*Mollugo verticillata*
BsDODA1	AKI33701	*Bougainvillea spectabilis*
BsDODA2	KR376309	*Bougainvillea spectabilis*

Cyclo-DOPA 5-*O*-glucosyltransferase (cDOPA5GT)

Label	Accession	Organism
MhcDOPA5GT	PZ746419 (this study)	*Mirabilis himalaica*
MjcDOPA5GT	BAD91803	*Mirabilis jalapa*
AhcDOPA5GT	AHV78226	*Amaranthus hypochondriacus*
AtrcDOPA5GT	AJY59054	*Amaranthus tricolor*
CccDOPA5GT	BAD91804	*Celosia cristata*
BvUGT92A1-like	XP_010681653	*Beta vulgaris* subsp. *vulgaris*
CqUGT92A1-like	XP_021748306	*Chenopodium quinoa*
SoUGT92A1-like	XP_021847933	*Spinacia oleracea*
BscDOPA5GT	AIS20905	*Bougainvillea spectabilis*
BpcDOPA5GT	LC542879	*Bougainvillea peruviana*
PaGT3	BAG71127	*Phytolacca americana*