

Table S2. The SCCGs data of 81 examined species

Species	Protein number	SCCGs	Percentage	Classification	Type
<i>Actinidia chinensis</i>	32876	617	0.01876749	Dicots	Fruit trees
<i>Amaranthus hypochondriacus</i>	23878	259	0.010846805	Dicots	Ornamental plants
<i>Amborella trichopoda</i>	27302	264	0.009669621	Other higher plant	
<i>Ananas comosus</i>	26656	317	0.011892257	Monocots	Fruit trees
<i>Aquilegia coerulea</i>	43545	849	0.019497072	Dicots	Ornamental plants
<i>Arabidopsis halleri</i>	26883	773	0.028754231	Dicots	
<i>Arabidopsis thaliana</i>	35381	1714	0.04844408	Dicots	
<i>Asparagus officinalis</i>	23120	225	0.009731834	Monocots	Vegetables
<i>Barbarea vulgaris</i>	25092	745	0.029690738	Dicots	
<i>Beta vulgaris</i>	32805	581	0.017710715	Dicots	Vegetables
<i>Boechera stricta</i>	29800	979	0.032852349	Dicots	
<i>Brachypodium distachyon</i>	52972	652	0.012308389	Monocots	
<i>Brachypodium stacei</i>	35795	448	0.012515714	Monocots	
<i>Brassica juncea</i>	76349	1571	0.020576563	Dicots	Vegetables
<i>Brassica napus</i>	100995	2211	0.021892173	Dicots	
<i>Brassica nigra</i>	47925	1232	0.025706834	Dicots	
<i>Brassica oleracea</i>	35315	762	0.021577233	Dicots	Vegetables
<i>Brassica rapa</i>	48158	1325	0.027513601	Dicots	Vegetables
<i>Capsella grandiflora</i>	26558	830	0.031252353	Dicots	Ornamental plants
<i>Capsella rubella</i>	33542	1161	0.034613321	Dicots	
<i>Capsicum annuum</i>	34587	590	0.017058432	Dicots	Vegetables
<i>Chara braunii</i>	30710	152	0.004949528	Lower plant	
<i>Chenopodium quinoa</i>	34424	665	0.019317918	Dicots	
<i>Chlamydomonas reinhardtii</i>	19516	111	0.005687641	Lower plant	
<i>Chlorella variabilis</i>	9776	42	0.004296236	Lower plant	
<i>Chondrus crispus</i>	9622	62	0.006443567	Lower plant	
<i>Chrysanthemum nankingense</i>	56870	875	0.015385968	Monocots	Ornamental plants
<i>Cicer arietinum</i>	28022	501	0.01787881	Dicots	Vegetables

Citrullus lanatus	22596	471	0.020844397	Dicots	Vegetables
Citrus grandis	42880	631	0.014715485	Dicots	Fruit trees
Coccomyxa subellipsoidea	9629	72	0.007477412	Lower plant	
Coffea canephora	25571	496	0.019396973	Dicots	Fruit trees
Corchorus capsularis	29353	471	0.01604606	Dicots	
Cucumis melo	28299	435	0.015371568	Dicots	Vegetables
Cucumis sativus	23581	502	0.021288325	Dicots	Vegetables
Cucurbita maxima	31962	702	0.021963582	Dicots	Vegetables
Cyanidioschyzon merolae	4972	12	0.002413516	Lower plant	
Cynara cardunculus	25079	467	0.018621157	Dicots	Ornamental plants
Daucus carota	31861	597	0.018737642	Dicots	Vegetables
Dioscorea cayenensis	64830	622	0.009594324	Monocots	
Dunaliella salina	18173	44	0.002421174	Lower plant	
Eragrostis curvula	55173	491	0.00889928	Monocots	
Eragrostis tef	40685	462	0.011355536	Dicots	
Eutrema salsugineum	29280	919	0.031386612	Dicots	
Galdieria sulphuraria	7013	26	0.003707401	Lower plant	
Glycine max	88406	1620	0.018324548	Dicots	
Helianthus annuus	52183	1060	0.020313129	Dicots	Ornamental plants
Ipomoea nil	41880	645	0.015401146	Dicots	Ornamental plants
Ipomoea triloba	46904	1017	0.021682586	Dicots	
Juglans regia	41077	970	0.023614188	Dicots	Fruit trees
Kalanchoe fedtschenkoi	45044	678	0.015051949	Dicots	Ornamental plants
Lactuca sativa	54434	575	0.010563251	Dicots	Vegetables
Leersia perrieri	38823	732	0.018854803	Monocots	Medicinal plants
Lupinus angustifolius	33073	923	0.027907961	Dicots	Ornamental plants
Malus domestica	40613	712	0.017531332	Dicots	Fruit trees
Manihot esculenta	41393	858	0.020728142	Dicots	
Marchantia polymorpha	24664	333	0.01350146	Other higher plant	Medicinal plants

<i>Medicago truncatula</i>	14158	1077	0.076070066	Dicots	
<i>Micromonas pusilla</i> CCMP1545	10634	85	0.007993229	Lower plant	
<i>Micromonas pusilla</i> RCC299	10103	96	0.009502128	Lower plant	
<i>Musa acuminata</i>	45586	624	0.013688413	Monocots	Fruit trees
<i>Musa nana</i> Lour.	43041	295	0.00685393	Monocots	Fruit trees
<i>Quercus robur</i>	25631	583	0.022745894	Dicots	
<i>Ostreococcus lucimarinus</i>	7769	65	0.008366585	Lower plant	
<i>Panax ginseng</i>	59117	941	0.015917587	Dicots	Medicinal plants
<i>Panicum hallii</i>	43148	556	0.012885881	Monocots	
<i>Phalaenopsis equestris</i>	29093	372	0.012786581	Monocots	Ornamental plants
<i>Phoenix dactylifera</i>	48266	667	0.013819252	Monocots	Fruit trees
<i>Physcomitrella patens</i>	47945	868	0.018104078	Other higher plant	
<i>Raphanus raphanistrum</i>	38102	827	0.021704897	Dicots	Vegetables
<i>Rosa chinensis</i>	47791	1077	0.022535624	Dicots	Ornamental plants
<i>Schrenkiella parvula</i>	26747	742	0.027741429	Dicots	
<i>Setaria italica</i>	42996	579	0.013466369	Monocots	
<i>Setaria viridis</i>	38334	441	0.011504148	Monocots	
<i>Sphagnum fallax</i>	45611	682	0.014952533	Other higher plant	
<i>Spirodela polyrhiza</i>	19482	182	0.009341957	Monocots	Medicinal plants
<i>Theobroma cacao</i>	44302	803	0.018125593	Dicots	Ornamental plants
<i>Trifolium pratense</i>	35206	463	0.013151167	Dicots	Ornamental plants
<i>Vigna angularis</i>	31241	546	0.017477033	Dicots	
<i>Vitis vinifera</i>	55415	915	0.016511775	Dicots	Fruit trees
<i>Volvox carteri</i>	16074	96	0.005972378	Lower plant	
