

Homoplasy And Homology In Plants

By Paul Nethercott

January 2014

www.creation.com

No.	Order	Family	Lineage
1	Unplaced	Boraginaceae	Heliotropium section
2	Asterales	Asteraceae	Chrysanthellum
3	Asterales	Asteraceae	Flaveria clade
4	Asterales	Asteraceae	Flaveria brownia
5	Asterales	Asteraceae	Pectis
6	Brassicales	Cleomeaceae	Cleome angustifolia
7	Brassicales	Cleomeaceae	Cleome gynandra
8	Brassicales	Cleomeaceae	Cleome oxalidea
9	Caryophyllales	Aizoaceae	Sesuvium/Trianthema
10	Caryophyllales	Amaranthaceae	Aerva
11	Caryophyllales	Amaranthaceae	Alternanthera
12	Caryophyllales	Amaranthaceae	Amaranthus
13	Caryophyllales	Amaranthaceae	Gomphreneae
14	Caryophyllales	Amaranthaceae	Tidestromia
15	Caryophyllales	Caryophyllaceae	Polycarpaea
16	Caryophyllales	Chenopodiaceae	Atriplex
17	Caryophyllales	Chenopodiaceae	Camphorosmeae
18	Caryophyllales	Chenopodiaceae	Halosarcia indica
19	Caryophyllales	Chenopodiaceae	Caroxyloneae
20	Caryophyllales	Chenopodiaceae	Haloxylon/Anabasis
21	Caryophyllales	Chenopodiaceae	Salsola
22	Caryophyllales	Chenopodiaceae	Bienertia
23	Caryophyllales	Chenopodiaceae	Suaeda aralocaspica
24	Caryophyllales	Chenopodiaceae	Suaeda sect.
25	Caryophyllales	Chenopodiaceae	Suaeda sect.
26	Caryophyllales	Gisekiaceae	Gisekia
27	Caryophyllales	Molluginaceae	Mollugo
28	Caryophyllales	Nyctaginaceae	Allionia
29	Caryophyllales	Nyctaginaceae	Boerhavia
30	Caryophyllales	Polygonaceae	Calligonum
31	Caryophyllales	Portulacaceae	Portulaca

No.	Order	Family	Lineage
32	Lamiales	Acanthaceae	Blepharis
33	Lamiales	Scrophulariaceae	Anticharis
34	Malpighiales	Euphorbiaceae	Euphorbia subgenus
35	Zygophyllales	Zygophyllaceae	Tribulus/Kalstroemia
36	Zygophyllales	Zygophyllaceae	Zygophyllum simplex
37	Alismatales	Hydrocharitaceae	Hydrilla
38	Alismatales	Hydrocharitaceae	Egeria
39	Poales	Cyperaceae	Bulbostylis
40	Poales	Cyperaceae	Cypereae
41	Poales	Cyperaceae	Eleocharis section
42	Poales	Cyperaceae	Eleocharis vivipara
43	Poales	Cyperaceae	Fimbristylis
44	Poales	Cyperaceae	Rynchospora
45	Poales	Poaceae	Alloteropsis
46	Poales	Poaceae	Altoparidisum
47	Poales	Poaceae	Andropogoneae
48	Poales	Poaceae	Anthenantia lanata
49	Poales	Poaceae	Aristida
50	Poales	Poaceae	Axonopus/Ophiochloa
51	Poales	Poaceae	Centropodia
52	Poales	Poaceae	Core Chloridoideae
53	Poales	Poaceae	Danthoniopsis
54	Poales	Poaceae	Digitaria
55	Poales	Poaceae	Echinochloa
56	Poales	Poaceae	Eriachne
57	Poales	Poaceae	Neurachne
58	Poales	Poaceae	Panicum/Pennisetum
59	Poales	Poaceae	Paspalum
60	Poales	Poaceae	Sorengia
61	Poales	Poaceae	Streptostachys
62	Poales	Poaceae	Stipagrostis

Journal of Experimental Botany, 2011, Volume 62, Number 9, Pages 3155-3169

<http://www.wikipedia.org>

<http://dx.doi.org/10.7554/eLife.00961>

Family	Species	Chemical Pathway
Chenopodiaceae	<i>Salsola oreophila</i>	(C3)
	<i>Salsola arbusculiformis</i>	(C3–C4)
	<i>Salsola arbuscula</i>	(C4)
Cleomaceae	<i>Cleome spinosa</i>	(C3)
	<i>Cleome paradoxa</i>	(C3–C4)
	<i>Cleome gynandra</i>	(C4)
Cyperaceae	<i>Eleocharis acuta</i>	(C3)
	<i>Eleocharis acicularis</i>	(C3–C4)
	<i>Eleocharis tetragona</i>	(C4)
Euphorbiaceae	<i>Euphorbia angusta</i>	(C3)
	<i>Euphorbia acuta</i>	(C3–C4)
	<i>Euphorbia lata</i>	(C3–C4)
	<i>Euphorbia mesembryanthemifolia</i>	(C4)
Molluginaceae	<i>Mollugo tenella</i>	(C3)
	<i>Mollugo verticillata</i>	(C3–C4)
	<i>Mollugo naudicalis</i>	(C3–C4)
	<i>Mollugo pentaphylla</i>	(C3–C4)
	<i>Mollugo cerviana</i>	(C4)
Poaceae	<i>Avena sativa</i>	(C3)
	<i>Neurachne tenuifolia</i>	(C3)
	<i>Neurachne minor</i>	(C3–C4)
	<i>Neurachne munroi</i>	(C4)
	<i>Panicum bisculatum</i>	(C3)
	<i>Panicum hians</i>	(C3–C4)
	<i>Panicum milioides</i>	(C3–C4)
	<i>Panicum miliaceum</i>	(C4)
	<i>Saccharum officinarum</i>	(C4)
	<i>Sorghum bicolor</i>	(C4)
	<i>Triticum aestivum</i>	(C3)
Portulacaceae	<i>Zea mays</i>	(C4)
	<i>Sorghum bicolor</i>	(C4)
	<i>Triticum aestivum</i>	(C3)
	<i>Zea mays</i>	(C4)
	<i>Sesuvium portulacastrum</i>	(C3)
Scrophularaceae	<i>Portulaca oleracea</i>	(C4)
	<i>Anticharis kaokoensis</i>	(C3)
Scrophularaceae	<i>Anticharis ebracteata</i>	(C3–C4)
	<i>Anticharis imbricate</i>	(C3–C4)
	<i>Anticharis namibensis</i>	(C3–C4)
	<i>Anticharis glandulosa</i>	(C4)

Family	Species	Pathway
Amaranthaceae	<i>Alternanthera ficoides</i>	(C3–C4)
	<i>Alternanthera tenella</i>	(C3–C4)
	<i>Alternanthera pungens</i>	(C4)
Asteraceae	<i>Flaveria cronquistii</i>	(C3)
	<i>Flaveria pringlei</i>	(C3)
	<i>Flaveria robusta</i>	(C3)
	<i>Flaveria angustifolia</i>	(C3–C4)
	<i>Flaveria anomala</i>	(C3–C4)
	<i>Flaveria chloraefolia</i>	(C3–C4)
	<i>Flaveria floridana</i>	(C3–C4)
	<i>Flaveria linearis</i>	(C3–C4)
	<i>Flaveria oppositifolia</i>	(C3–C4)
	<i>Flaveria ramosissima</i>	(C3–C4)
	<i>Flaveria sonorensis</i>	(C3–C4)
	<i>Flaveria brownie</i>	(C3–C4)
	<i>Flaveria vaginata</i>	(C3–C4)
	<i>Flaveria pubescens</i>	(C3–C4)
	<i>Flaveria australasica</i>	(C4)
<i>Flaveria bidentis</i>	(C4)	
<i>Flaveria kochiana</i>	(C4)	
<i>Flaveria trinervia</i>	(C4)	
<i>Parthenium incanum</i>	(C3)	
<i>Parthenium hysterophorus</i>	(C3–C4)	

Family	Species	Pathway
Boraginaceae	<i>Heliotropium europaeum</i>	(C3)
	<i>Heliotropium calcicola</i>	(C3)
	<i>Heliotropium convolvu</i>	(C3–C4)
	<i>Heliotropium greggii</i>	(C3–C4)
	<i>Heliotropium polyphyllum</i>	(C4)
Brassicaceae	<i>Moricandia foetida</i>	(C3)
	<i>Moricandia arvensis</i>	(C3–C4)
	<i>Moricandia spinosa</i>	(C3–C4)
	<i>Moricandia nitens</i>	(C3–C4)
	<i>Raphanus sativus</i>	(C3)
	<i>Diptotaxis muralis</i>	(C3–C4)
<i>Diptotaxis tenuifolia</i>	(C3–C4)	

