

**Table S2.** Gretchen Hagen (*GH3*) genes identified in some sequenced plant genomes.

Species	<sup>1</sup> Genome Size (Mb)	<sup>2</sup> Members of Group I	<sup>3</sup> Members of Group II	Members of Group III	Total members of GH3 family	Reference
<i>Arabidopsis thaliana</i>	120.69	2	8	9	19	[16]
<i>Brassica napus</i>	848.20	8	22	36	66	[23]
<i>Brassica oleracea</i>	554.98	4	9	12	25	[23]
<i>Brassica rapa</i>	234.69	4	10	24	38	[23]
<i>Populus euphratica</i>	496.033	4	6	4	14	[45]
<i>Populus trichocarpa</i>	434.29	4	6	3	13	[14]
<i>Prunus persica</i>	227.57	2	3	3	8	[14]
<i>Triticum aestivum</i>	14,471.4	10	10	16	36	[46]
<i>Vitis vinifera</i>	486.20	3	6	--	9	[21]
<i>Zea mays</i>	2243.62	5	8	--	13	[47]
<i>Actinidia chinensis</i>	653.93	4	11	--	12	[48]
<i>Brachypodium distachyon</i>	218.01	2	6	--	8	[49]
<i>Carica papaya</i>	370.42	2	4	--	6	[50]
<i>Cicer arietinum</i>	347.25	2	5	--	11	[51]
<i>Coffea canephora</i>	568.612	1	17	--	18	This study
<i>Glycine max</i>	1,116.18	8	16	--	24	[52]
<i>Hordeum vulgare</i>	233.13	2	7	--	9	[49]
<i>Malus domestica</i>	660.46	5	10	--	15	[53]
<i>Medicago truncatula</i>	429.61	6	7	--	14	[54]
<i>Oriza sativa</i>	490.15	4	9	--	13	[55]
<i>Physcomitrella patens</i>	472.08	2	--	--	2	[45]
<i>Setaria italica</i>	477.54	6	11	--	17	[49]
<i>Solanum lycopersicum</i>	812.994	9	6	--	15	[22]
<i>Solanum tuberosum</i>	772.25	4	9	--	13	[33]
<i>Sorghum bicolor</i>	374.25	4	7	--	11	[49]
<i>Theobroma cacao</i>	324.88	2	17	--	19	[52]