

Table S1. Trichome phenotype of *ZFP8* and *GIS2* RNAi lines

	Sepals	Second c. leaf	Third c. leaf	Second br.	Third br.	Stem	Rel. exp. level
Wild type	58.5 (0.9)	27.5 (1.3)	9.0 (0.7)	42.5 (2.6)	10.5 (1.7)	77.2 (0.8)	1.0 (0.2)
<i>zfp8</i>	41.3 (0.9)	12.1 (1.0)	3.2 (0.4)	38.7 (3.5)	5.6 (1.2)	67.7 (1.6)	0.2 (0.0)
<i>ZFP8-R1</i>	41.0 (0.7)	14.1 (1.0)	3.0 (0.3)	36.1 (3.0)	4.8 (1.2)	66.6 (1.4)	0.2 (0.1)
<i>gis2</i>	2.2 (0.3)	30.1 (0.8)	7.6 (0.4)	41.7 (2.1)	6.1 (0.9)	73.4 (1.2)	(*)
<i>GIS2-R1</i>	23.2 (1.1)	n.d.	n.d.	n.d.	n.d.	n.d.	0.2 (0.0)

Trichome counts on different inflorescent organs of *ZFP8* and *GIS2* loss-of-function lines. See Table S2 legend for detail on measurements. Trichome counts represent averages and standard error for 16-20 plants. *ZFP8-R*, *GIS2-R*, RNAi lines in which the *ZFP8* or *GIS2* gene was silenced; c. leaf, cauline leaf; br., branch; Rel. exp. level, expression level of the *ZFP8* or *GIS2* gene in the mutant or silenced line relative to wild-type controls; (*) *GIS2* expression was found to be abolished in *gis2* by semi-quantitative RT-PCR (Fig. 1).

Table S2. Influence of GIS, ZFP8 and GIS2 on growth and development

	Plant height (cm)	First adult leaf	Number of leaves at flowering	Flowering time (days after sowing)
Wild type	17.6 (0.1)	6.4 (0.1)	12.5 (0.3)	28.6 (0.2)
RNAi control	17.6 (0.1)	6.4 (0.1)	12.5 (0.3)	28.5 (0.1)
<i>gis</i>	17.6 (0.1)	6.3 (0.1)	12.4 (0.2)	28.4 (0.1)
<i>zfp8</i>	17.7 (0.1)	6.3 (0.1)	12.3 (0.3)	28.3 (0.2)
<i>gis2</i>	17.8 (0.2)	6.4 (0.1)	12.5 (0.2)	28.4 (0.2)
<i>gis gis2</i>	17.6 (0.1)	6.2 (0.1)	12.1 (0.2)	28.4 (0.1)
<i>gis ZFP8-R1</i>	17.6 (0.1)	6.5 (0.1)	12.7 (0.3)	28.7 (0.2)
<i>gis ZFP8-R2</i>	17.9 (0.2)	6.6 (0.1)	13.0 (0.2)	28.3 (0.2)
<i>gis2 ZFP8-R1</i>	17.6 (0.1)	6.4 (0.1)	12.8 (0.2)	28.7 (0.2)
<i>gis2 ZFP8-R2</i>	17.6 (0.1)	6.4 (0.1)	13.2 (0.2)	28.8 (0.2)
<i>gis ZFP8-R1 gis2</i>	17.5 (0.1)	6.2 (0.1)	12.2 (0.3)	28.3 (0.2)
<i>gis ZFP8-R2 gis2</i>	17.5 (0.1)	6.2 (0.1)	12.1 (0.2)	28.4 (0.2)

Parameters of growth and development for the different lines used in our study. The first adult leaf is defined as the first leaf developing abaxial trichomes. Values represent averages and standard errors for 20 plants.