

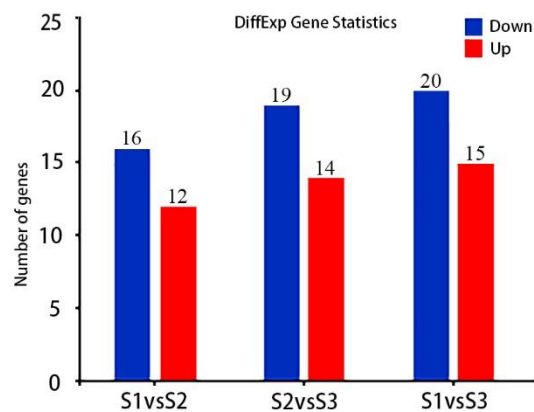
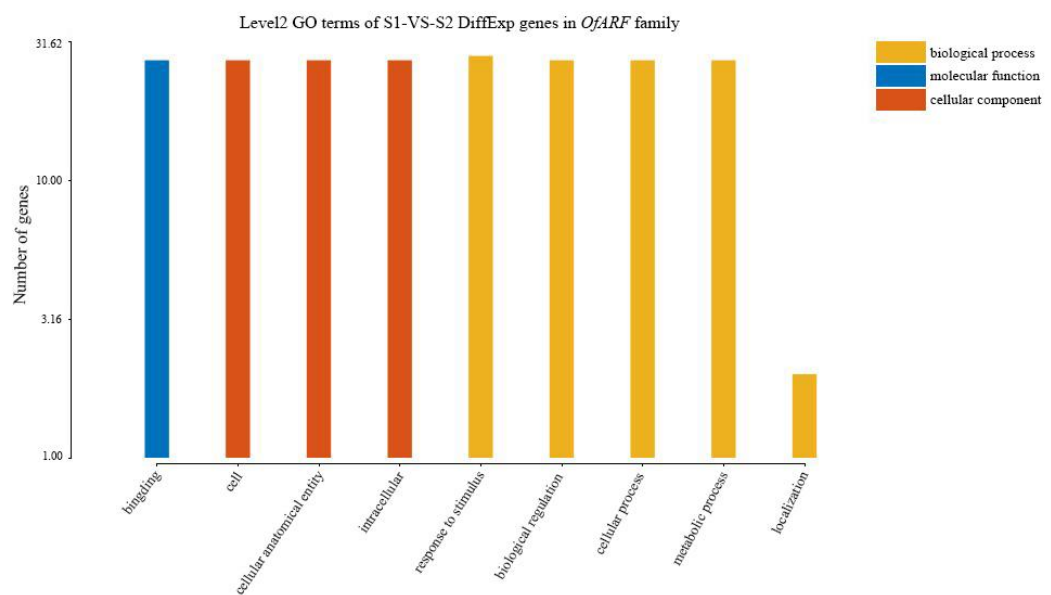
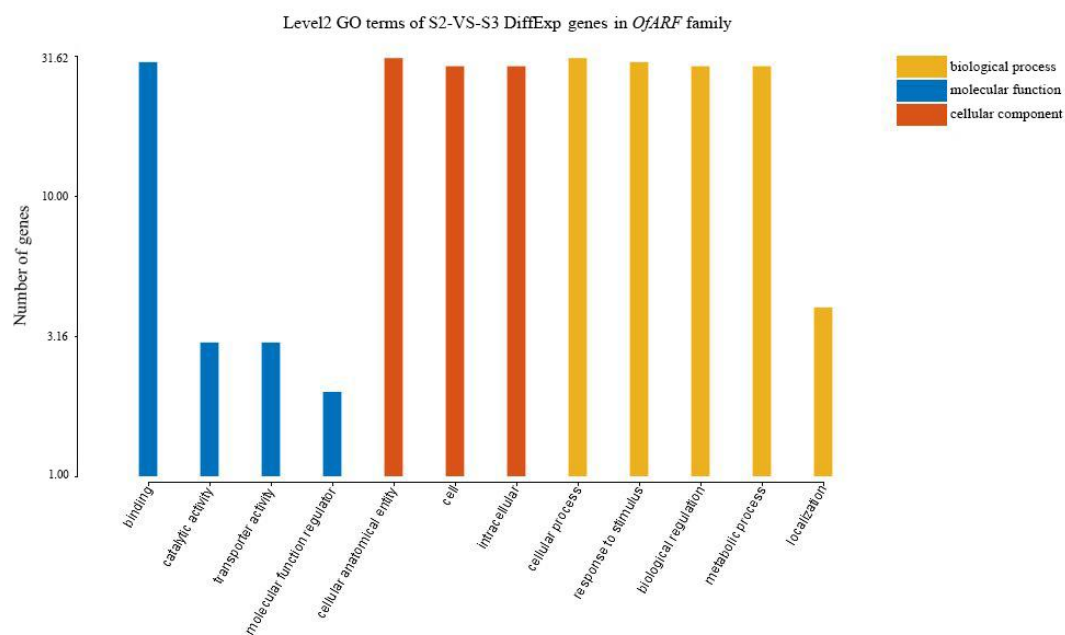
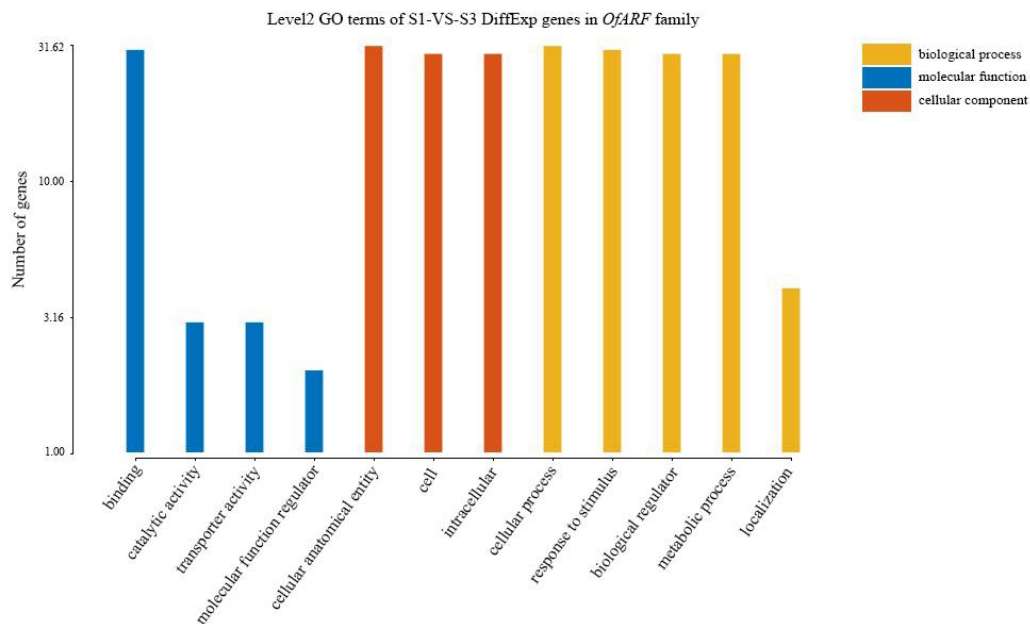


Figure S1. Differentially expressed genes (DEGs) across S1, S2, and S3 flower samples





B



C

Figure S2. A: Level2 GO terms of differentially expressed genes (DEGs) across S1 and S2 flower samples; B: Level2 GO terms of differentially expressed genes (DEGs) across S2 and S3 flower samples; C: Level2 GO terms of differentially expressed genes (DEGs) across S1 and S3 flower samples

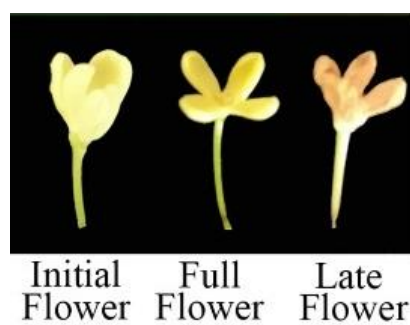


Figure S3. Flower stages in the heatmap



Figure S4. Flower stages in the qRT-PCR process

Table S1. Specific primers used for qRT-PCR

Number	Gene ID	Primer sequence (5'→3')	Tm(°C)
1	<i>OfARF10a</i>	F, CGGATTTTCTGTCCCTCGTAG	60.2
		R, CTAGGTCGAGCAGCTCTTCTAATTC	60.8
2	<i>OfARF10b</i>	F, AACTATTTGGGACTTCTTTGACCG	60.4
		R, CACTTTTGTGCAGCTCCTCTTATT	59.8
3	<i>OfARF11a</i>	F, ACCTGCCTCAATTTTACGCC	60.0
		R, CGTGCCCGCTTACTCCTTT	60.7
4	<i>OfARF12</i>	F, AAGGAATAAGCGGGCACGAC	59.8
		R, AAGAAGAGTCCACTGGCGATT	59.6
5	<i>OfARF13</i>	F, TGGTCCTTTAGTTACTGTTCCTCG	60.3
		R, TCCGTATCCGGTTCAGCCT	61.0
6	<i>OfARF14a</i>	F, GTCCTTTAGTCACTGTGCCTCG	60.0
		R, TCGTATCTGAGGCAGTTAGAGTCTT	61.0
7	<i>OfARF14b</i>	F, ATGATGGCGGAAAATGGAAT	59.5
		R, CGAGGCACAGTAATAAAGGACC	60.0
8	<i>OfARF21a</i>	F, GCACCGCCAAACACTAACG	59.7
		R, AATAGAAGGTGGTTTTGGGGATC	61.2
9	<i>OfARF22a</i>	F, GTATCCATCGCCATTCTCCCT	59.8
		R, ATATCACCGCTATCTTTACAACCAG	60.5
10	<i>OfARF22b</i>	F, TATCCATCGCCATTCTCCCT	60.4
		R, TCTCCAATACCACCACGAAGC	59.6
11	<i>OfARF24a</i>	F, TGGGTTTCGCTTTGTTCCG	61.0
		R, CAACGGTAGGAAGCAAGAGCC	59.8
12	<i>OfARF24b</i>	F, GCTGGGTTCACTTTGTTCCG	60.5
		R, GCATCCAAGCTACTACACGTTC	61.2

Table S2. Subcellular locations predicted for *OfARF* proteins

Gene Name	Combined												Most likely location
	Extra	Plas	Cytop	Cytos	ER	Golgi	Iyso	Mito	Chlo	Pero	Vacu	Nuc	
OfARF1a	0.1691	0.2914	1.2612	0.0128	0.0429	0.0487	0.1067	0.4061	1.1567	0.0676	0.0348	1.4021	Nuclear
OfARF1b	0.3916	0.5517	0.9364	0.0109	0.0377	0.0446	0.1706	0.2873	0.8832	0.0457	0.0367	1.6036	Nuclear
OfARF2	0.3661	0.2259	1.3013	0.0161	0.0697	0.0668	0.1487	0.3375	0.4596	0.0483	0.0757	1.8844	Nuclear
OfARF3a	0.1585	0.2005	1.0516	0.0117	0.0507	0.0355	0.1271	0.4751	1.4829	0.1221	0.0352	1.2492	Chloroplast
OfARF3b	0.4787	0.6561	0.8894	0.0153	0.0402	0.0441	0.2772	0.3121	0.4984	0.1018	0.0378	1.6491	Nuclear
OfARF4a	0.3049	0.2346	0.7387	0.0134	0.0580	0.0204	0.2414	0.1334	0.2132	0.0714	0.0521	2.9186	Nuclear
OfARF4b	0.7961	0.1997	0.9150	0.0166	0.0753	0.0402	0.3350	0.1817	0.2245	0.1545	0.2507	1.8106	Nuclear
OfARF5a	0.2701	0.1855	1.0737	0.0123	0.0306	0.0469	0.1920	0.1750	0.7917	0.0817	0.0424	2.0981	Nuclear
OfARF5b	0.2195	0.3043	0.7534	0.0115	0.0362	0.0583	0.1765	0.1352	0.7142	0.0482	0.0330	2.5098	Nuclear
OfARF6a	0.1420	0.3924	1.1283	0.0122	0.0561	0.0630	0.0729	0.1732	0.5854	0.0337	0.0725	2.2684	Nuclear
OfARF6b	0.1587	0.2133	0.9383	0.0121	0.0460	0.0953	0.0600	0.3026	0.6758	0.0541	0.0630	2.3810	Nuclear

OfARF7a	0.2867	0.5095	0.6295	0.0221	0.1136	0.3093	0.1607	0.2177	1.1135	0.0433	0.0994	1.4946	Nuclear
OfARF7b	0.3758	0.7772	0.4562	0.0142	0.1325	0.0982	0.3237	0.2028	1.3294	0.0360	0.0538	1.2003	Chloroplast
OfARF8a	0.6758	0.7601	0.6941	0.0250	0.1897	0.0797	0.1799	0.4802	1.3513	0.1558	0.0728	0.3356	Chloroplast
OfARF8b	0.6626	1.1477	0.6545	0.0260	0.0546	0.0995	0.0695	0.3152	0.1764	0.0653	0.0750	1.6538	Nuclear
OfARF9a	0.1392	0.1671	0.3880	0.0130	0.0314	0.0207	0.0181	0.0403	0.0627	0.0200	0.0155	4.0840	Nuclear
OfARF9b	0.7683	0.1933	0.3787	0.0156	0.0491	0.0490	0.0520	0.0996	0.3017	0.0640	0.0160	3.0127	Nuclear
OfARF10a	0.1151	0.0452	1.3423	0.0448	0.1251	0.0655	0.0490	0.3703	0.4126	0.2059	0.0193	2.2049	Nuclear
OfARF10b	0.1659	0.0985	0.8103	0.0426	0.0865	0.0385	0.0515	0.1363	0.8321	0.1078	0.0296	2.6004	Nuclear
OfARF11a	0.0825	0.0174	0.7312	0.0178	0.0609	0.1067	0.0137	0.2060	0.1057	0.0751	0.0205	3.5625	Nuclear
OfARF11b	0.0630	0.0134	0.4731	0.0104	0.0420	0.0690	0.0097	0.1027	0.0532	0.0630	0.0136	4.0870	Nuclear
OfARF12	0.0671	0.0300	0.6956	0.0128	0.0352	0.0999	0.0176	0.2969	0.1446	0.0838	0.0247	3.4919	Nuclear
OfARF13	0.1811	0.1128	0.4398	0.0148	0.0500	0.0754	0.0247	0.0888	0.1006	0.0522	0.0094	3.8505	Nuclear
OfARF14a	0.0876	0.1014	1.3785	0.0174	0.0703	0.0556	0.0357	0.3195	0.0721	0.1281	0.0126	2.7211	Nuclear
OfARF14b	0.1362	0.1340	1.1310	0.0259	0.1537	0.0470	0.0314	0.1435	0.0753	0.1100	0.0135	2.9986	Nuclear
OfARF15	0.2358	0.0545	1.3363	0.0126	0.0348	0.0223	0.0173	0.4681	0.1284	0.1893	0.0125	2.4881	Nuclear
OfARF16a	0.1140	0.0381	0.7390	0.0065	0.0148	0.0244	0.0118	0.0754	0.0912	0.0848	0.0084	3.7917	Nuclear
OfARF16b	0.1991	0.8707	1.1292	0.0121	0.0314	0.0393	0.0191	0.3684	0.2127	0.0744	0.0138	2.0297	Nuclear
OfARF17a	0.0491	0.0426	0.9418	0.0181	0.0216	0.0707	0.0099	0.1937	0.2756	0.1036	0.0078	3.2655	Nuclear
OfARF17b	0.0271	0.0254	0.4591	0.0091	0.0191	0.0247	0.0080	0.1211	0.1705	0.0235	0.0079	4.1044	Nuclear
OfARF18	0.0370	0.0291	0.7627	0.0104	0.0065	0.0138	0.0028	0.3545	0.0908	0.0487	0.0065	3.6371	Nuclear
OfARF19	0.0591	0.0247	1.2352	0.0085	0.0199	0.0612	0.0208	0.2218	0.1987	0.1103	0.0103	3.0294	Nuclear
OfARF20a	0.0621	0.0286	0.8904	0.0126	0.0136	0.0737	0.0254	0.1932	0.1482	0.0730	0.0158	3.4634	Nuclear
OfARF20b	0.0538	0.0300	0.8898	0.0128	0.0132	0.0820	0.0225	0.1893	0.1248	0.0709	0.0129	3.4977	Nuclear
OfARF21a	0.1635	0.6878	0.3004	0.0152	0.0173	0.0256	0.0743	0.0437	0.0226	0.0204	0.0121	3.6171	Nuclear
OfARF21b	0.2192	0.6037	0.4002	0.0172	0.0205	0.0412	0.1107	0.0504	0.0275	0.0200	0.0146	3.4749	Nuclear
OfARF22a	0.1895	0.4434	0.4415	0.0152	0.0263	0.0199	0.0615	0.0543	0.0225	0.0249	0.0132	3.6878	Nuclear
OfARF22b	0.1514	0.4685	0.4614	0.0159	0.0169	0.0150	0.0404	0.0533	0.0247	0.0199	0.0133	3.7194	Nuclear
OfARF23	0.3210	0.4663	0.4577	0.0204	0.0503	0.0317	0.1117	0.1228	0.0378	0.1079	0.0164	3.2560	Nuclear
OfARF24a	0.4216	0.3085	0.4654	0.0119	0.0331	0.0249	0.0703	0.0698	0.0321	0.0440	0.0166	3.5018	Nuclear
OfARF24b	0.2985	0.3732	0.5029	0.0162	0.0364	0.0279	0.0754	0.0763	0.0343	0.0506	0.0214	3.4869	Nuclear
OfARF25a	0.1571	0.2649	0.5119	0.0107	0.0114	0.0430	0.0316	0.0363	0.0161	0.0133	0.0092	3.8946	Nuclear
OfARF25b	1.3184	0.4820	0.7318	0.0108	0.0309	0.0795	0.1268	0.0537	0.0204	0.0248	0.0263	2.0947	Nuclear
OfARF26a	0.2313	0.3574	0.2480	0.0264	0.0198	0.0117	0.0134	0.0306	0.0147	0.0102	0.0127	4.0238	Nuclear
OfARF26b	0.2438	0.3644	0.2482	0.0270	0.0197	0.0114	0.0134	0.0303	0.0146	0.0104	0.0128	4.0041	Nuclear
OfARF27	0.5288	0.9085	0.7992	0.0230	0.0510	0.0255	0.2670	0.4789	0.7579	0.0887	0.1065	0.9650	Nuclear
OfARF28a	0.0924	0.3604	0.2520	0.0357	0.0130	0.0090	0.0072	0.0289	0.0142	0.0098	0.0096	4.1678	Nuclear
OfARF28b	0.1081	0.4000	0.2662	0.0495	0.0150	0.0098	0.0093	0.0297	0.0155	0.0120	0.0100	4.0748	Nuclear
OfARF29a	0.1359	0.2826	0.2019	0.0318	0.0150	0.0115	0.0102	0.0265	0.0120	0.0121	0.0074	4.2531	Nuclear
OfARF29b	0.1813	0.3842	0.2342	0.0354	0.0150	0.0086	0.0089	0.0283	0.0143	0.0104	0.0098	4.0696	Nuclear

Extra=Extracellular, Plas=PlasmaMembrane, Cytop=Cytoplasmic, Cytos=Cytoskeletal, ER= Endoplasmic reticulum, Golgi= Golgi apparatus, Lyso=Lysosomal, Mito=Mitochondrial, Chlo=Chloroplast, Pero=Peroxisomal, Vacu=Vacuole, Nuc=Nuclear.

Table S3. Correlation analysis between *ARF* expression profiles and endogenous IAA concentration

	<i>OfARF10a</i>	<i>OfARF10b</i>	<i>OfARF11a</i>	<i>OfARF12</i>	<i>OfARF13</i>	<i>OfARF14a</i>	<i>OfARF14b</i>	<i>OfARF21a</i>	<i>OfARF22a</i>	<i>OfARF22b</i>	<i>OfARF24a</i>	<i>OfARF24b</i>	IAA
<i>OfARF10a</i>	1	0.795**	0.810**	0.890**	0.685**	0.641*	0.863**	0.767**	0.903**	0.953**	0.769**	0.827**	0.780**
<i>OfARF10b</i>	0.795**	1	0.662**	0.728**	0.464	0.579*	0.682**	0.858**	0.766**	0.873**	0.914**	0.850**	0.629*
<i>OfARF11a</i>	0.810**	0.662**	1	0.812**	0.911**	0.749**	0.961**	0.435	0.867**	0.790**	0.479	0.555*	0.806**
<i>OfARF12</i>	0.890**	0.728**	0.812**	1	0.753**	0.760**	0.857**	0.662**	0.921**	0.885**	0.639*	0.714**	0.886**
<i>OfARF13</i>	0.685**	0.464	0.911**	0.753**	1	0.784**	0.872**	0.212	0.741**	0.592*	0.216	0.332	0.855**
<i>OfARF14a</i>	0.641*	0.579*	0.749**	0.760**	0.784**	1	0.801**	0.411	0.687**	0.581*	0.387	0.472	0.914**
<i>OfARF14b</i>	0.863**	0.682**	0.961**	0.857**	0.872**	0.801**	1	0.503	0.903**	0.830**	0.550*	0.611*	0.854**
<i>OfARF21a</i>	0.767**	0.858**	0.435	0.662**	0.212	0.411	0.503	1	0.615*	0.839**	0.967**	0.969**	0.482
<i>OfARF22a</i>	0.903**	0.766**	0.867**	0.921**	0.741**	0.687**	0.903**	0.615*	1	0.909**	0.666**	0.706**	0.833**
<i>OfARF22b</i>	0.953**	0.873**	0.790**	0.885**	0.592*	0.581*	0.830**	0.839**	0.909**	1	0.866**	0.884**	0.708**
<i>OfARF24a</i>	0.769**	0.914**	0.479	0.639*	0.216	0.387	0.550*	0.967**	0.666**	0.866**	1	0.951**	0.451
<i>OfARF24b</i>	0.827**	0.850**	0.555*	0.714**	0.332	0.472	0.611*	0.969**	0.706**	0.884**	0.951**	1	0.553*
IAA	0.780**	0.629*	0.806**	0.886**	0.855**	0.914**	0.854**	0.482	0.833**	0.708**	0.451	0.553*	1