



Supplement

The following supplementary materials are available for this article: Lu, C.-T., C.-L. Yang, Y.-I. Hung, P.-H. Chen, J.-C. Wang. 2022. A taxonomic revision on *Isotrema* (Aristolochiaceae) in Taiwan, including one new species. *Taiwania* 67(3): 391-407. doi: [10.6165/tai.2022.67.391](https://doi.org/10.6165/tai.2022.67.391)

Table 1. Sample size, minimum, maximum, mean, standard deviation, median, and Q1 and Q3 value of six flower quantitative characters listed by six *a priori* taxa.

A. Utricle length (UI)

group	n	min (mm)	max (mm)	mean (mm)	Stand dev.	Q1 (mm)	median (mm)	Q3 (mm)
CU	18	16.786	25.357	21.053	3.0673	18.661	20.893	24.107
HO	17	17.321	26.786	22.698	2.7144	21.250	23.281	24.755
PA	8	10.926	15.741	13.333	1.8119	11.319	13.750	14.908
PM	16	14.559	19.412	17.178	1.3046	16.361	17.280	18.051
SM	26	13.992	19.849	16.730	1.5162	15.375	16.874	17.626
YJ	4	11.714	13.233	12.609	0.6768	11.904	12.745	13.179

B. Tube length (TI)

group	n	min (mm)	max (mm)	mean (mm)	Stand dev.	Q1 (mm)	median (mm)	Q3 (mm)
CU	18	14.643	23.214	19.732	2.6140	17.768	19.107	21.964
HO	17	20.714	26.607	23.487	1.6578	22.143	22.857	24.844
PA	8	12.778	18.148	15.625	1.7099	14.445	15.556	17.130
PM	16	14.706	21.618	18.216	1.8003	17.059	18.162	19.228
SM	26	16.378	25.489	20.370	2.0322	18.906	19.766	21.965
YJ	4	12.474	16.812	14.264	1.8244	12.827	13.884	16.080

C. Perianth length (PI)

group	n	min (mm)	max (mm)	mean (mm)	Stand dev.	Q1 (mm)	median (mm)	Q3 (mm)
CU	18	21.668	31.786	26.428	2.979	24.241	26.518	28.966
HO	17	25.893	35.893	31.366	2.8748	29.576	31.406	34.011
PA	8	17.037	24.167	20.012	2.2856	18.287	19.676	21.783
PM	16	17.059	26.471	23.529	2.1888	22.684	23.603	25.074
SM	26	20.717	29.286	25.517	1.9518	24.355	25.761	26.628
YJ	4	16.487	21.259	18.331	2.0769	16.704	17.788	20.500

D. Utricle width (Uw)

group	n	min (mm)	max (mm)	mean (mm)	Stand dev.	Q1 (mm)	median (mm)	Q3 (mm)
CU	18	11.25	21.071	17.308	3.2599	13.705	17.321	20.402
HO	17	13.214	22.500	17.850	2.7080	15.078	18.393	20.0665
PA	8	9.074	13.796	10.440	1.4762	9.657	10.000	10.8567
PM	16	10.441	18.824	15.800	2.1351	14.533	15.441	17.6837
SM	26	10.156	16.487	12.801	1.6666	11.253	12.969	13.75
YJ	4	9.328	9.870	9.653	0.2342	9.409	9.708	9.843

E. The ratio of perianth length above utricule width (PI/Uw)

group	n	min	max	mean	Stand dev.	Q1	median	Q3
CU	18	1.158	1.926	1.557	0.1935	1.435	1.570	1.669
HO	17	1.447	2.274	1.783	0.2235	1.605	1.784	1.968
PA	8	1.546	2.173	1.932	0.2167	1.774	1.978	2.123
PM	16	1.284	1.760	1.504	0.1448	1.380	1.486	1.642
SM	26	1.585	2.615	2.024	0.2942	1.773	1.958	2.235
YJ	4	1.767	2.154	1.897	0.1800	1.770	1.833	2.088

F. The ratio of utricule length above perianth length (UI/PI)

group	n	min	max	mean	Stand dev.	Q1	median	Q3
CU	18	0.668	0.938	0.796	0.0660	0.767	0.787	0.827
HO	17	0.642	0.820	0.723	0.0492	0.683	0.714	0.765
PA	8	0.563	0.799	0.670	0.0897	0.581	0.669	0.762
PM	16	0.589	0.853	0.735	0.0760	0.672	0.749	0.797
SM	26	0.526	0.741	0.657	0.0567	0.623	0.678	0.692
YJ	4	0.587	0.803	0.695	0.0896	0.609	0.695	0.781



Table 2. The result of ANOVA and Tukey's pairwise test

	Utricle length (UI)	Tube length (TI)	Perianth length (PI)	Utricle width (Uw)	Perianth length (PI)/utricle width (Uw)	Utricle length (UI)/Perianth length (PI)
F test	37.76	26.25	36.76	23.88	14.97	10.6
p	5.143×10 ⁻²⁰	8.318×10 ⁻¹⁶	1.098×10 ⁻¹⁹	8.409×10 ⁻¹⁵	1.864×10 ⁻¹⁰	6.831×10 ⁻⁸
	Tuley's Q (p)	Tuley's Q (p)	Tuley's Q (p)	Tuley's Q (p)	Tuley's Q (p)	Tuley's Q (p)
CU-HO	3.193(0.2233)	7.731(6.912×10 ⁻⁶)*	8.414(9.109×10 ⁻⁷)*	0.9728(0.9828)	4.131(0.0495)*	4.64(0.0183)*
CU-PA	11.93(1.234×10 ⁻¹⁰)*	6.729(1.163×10 ⁻⁴)*	8.704(3.782×10 ⁻⁷)*	9.804(1.244×10 ⁻⁸)*	5.461(2.953×10 ⁻³)*	6.388(2.901×10 ⁻⁴)*
CU-PM	7.403(1.778×10 ⁻⁵)*	3.07(0.2624)	4.848(0.0118)*	2.663(0.4198)	0.9696(0.9831)	3.817(0.0863)
CU-SM	9.255(6.909×10 ⁻⁸)*	1.449(0.9083)	1.714(0.8298)	8.916(1.972×10 ⁻⁷)*	9.426(4.057×10 ⁻⁸)*	9.704(1.7×10 ⁻⁸)*
CU-YJ	10.03(6.167×10 ⁻⁹)*	6.888(7.544×10 ⁻⁵)*	8.443(8.336×10 ⁻⁷)*	8.399(9.522×10 ⁻⁷)*	3.805(0.0881)	3.934(0.0705)
HO-PA	14.34(1.101×10 ⁻¹⁰)*	12.77(1.11×10 ⁻¹⁰)*	15.26(1.101×10 ⁻¹⁰)*	10.48(1.525×10 ⁻⁹)*	2.154(0.6505)	2.671(0.4164)
HO-PM	10.4(1.939×10 ⁻⁹)*	10.54(1.31×10 ⁻⁹)*	12.95(1.106×10 ⁻¹⁰)*	3.571(0.1286)	4.968(9.108×10 ⁻³)*	0.7397(0.9951)
HO-SM	12.56(1.118×10 ⁻¹⁰)*	6.958(6.219×10 ⁻⁵)*	10.81(6.084×10 ⁻¹⁰)*	9.82(1.183×10 ⁻⁸)*	4.787(0.0135)*	4.509(0.0239)*
HO-YJ	11.92(1.238×10 ⁻¹⁰)*	11.56(1.544×10 ⁻¹⁰)*	13.52(1.102×10 ⁻¹⁰)*	8.947(1.795×10 ⁻⁷)*	1.27(0.9459)	1.09(0.9717)
PA-PM	5.829(1.211×10 ⁻³)*	4.167(0.0463)*	4.694(0.0163)*	7.508(1.319×10 ⁻⁵)*	6.129(5.688×10 ⁻⁴)*	3.24(0.2096)
PA-SM	5.516(2.596×10 ⁻³)*	8.172(1.885×10 ⁻⁵)*	7.848(4.915×10 ⁻⁶)*	3.542(0.1347)	1.409(0.9179)	0.6462(0.9974)
PA-YJ	0.7763(0.9939)	1.548(0.8822)	1.582(0.8723)	0.779(0.9938)	0.3554(0.9999)	0.8812(0.9890)
PM-SM	0.9257(0.9863)	4.719(0.0155)*	3.588(0.1253)	5.724(1.567×10 ⁻³)*	10.14(4.29×10 ⁻⁹)*	5.237(0.004978)*
PM-YJ	5.366(3.697×10 ⁻³)*	4.924(0.0100)*	5.369(3.665×10 ⁻³)*	6.669(1.371×10 ⁻³)*	4.358(0.0322)	1.544(0.8833)
SM-YJ	5.037(7.812×10 ⁻³)*	7.916(4.014×10 ⁻⁶)*	7.711(7.316×10 ⁻⁶)*	3.554(0.1321)	1.466(0.9042)	1.491(0.8977)

* significantly different

Table 3. The eigenvalue, %variance, and coefficients in the first three axes of discriminant analysis

	Axis 1	Axis 2
Eigenvalue	3.0434	1.0243
% variance	67.48	22.71
Uw	-0.46295	-0.44988
PI	0.95125	0.19071
TI	0.13948	-0.2049
UI	-0.49228	0.41337
PI/Uw	-4.4716	0.21823
UI/PI	19.378	-14.767