

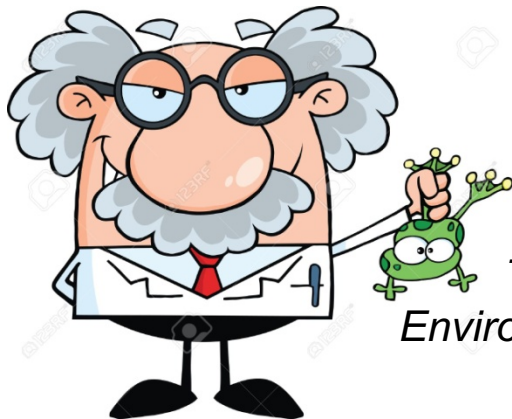


Workshop on How to Publish Papers in International Journals: February 2018

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How to write the Results. Results (II) – The Tables.



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Results: Tables

First points.

- Explicit verbal description of Results is required. Tables do not explain themselves any more than Figures do.
- The clumsy incomprehensible table has a great tradition in science. Try to avoid information overload.
- Conclusions based on statistics need to explicitly stated and it must be clear what data was used, the statistical tests that were used and the P values must be quoted.
- Try and keep tables as small as possible. About 100 numbers should be the maximum. It is better to have 2 or 3 smaller tables than one big one.

Table 4. Summary of the measured morphological and anatomical characters (mean±S.E.) of *H. ovalis*. Lower case letters indicate the statistical differences within depth zones and sites in each month; upper case letters indicates statistical differences among months.

Month	Site	Depth	Morphological and anatomical characters						
			Leaf width	Leaf length	Leaf area	Mesophyll width	Mesophyll length	Air lacunar width	Air lacunar length
July-12	YL	U	5.16±0.18 ^{ab,A}	10.03±0.29 ^{a,A}	42.33±2.62 ^{ab,A}	43.01±1.55 ^{d,A}	58.47±1.64 ^{b,A}	76.11±4.68 ^{b,A}	102.96±3.93 ^{bc,A}
		L	6.39±0.17 ^{c,A}	12.29±0.31 ^{b,A}	63.79±3.18 ^{c,A}	40.30±1.16 ^{cd,A}	56.77±1.61 ^{b,A}	76.11±3.65 ^{b,A}	107.91±3.54 ^{c,A}
		S	5.30±0.11 ^{b,A}	10.10±0.24 ^{a,A}	43.09±1.94 ^{ab,A}	37.01±1.01 ^{bc,A}	54.59±1.60 ^{ab,A}	52.70±2.63 ^{a,A}	86.97±2.93 ^{a,A}
	KM	U	4.71±0.09 ^{a,A}	9.25±0.18 ^{a,A}	35.31±1.21 ^{a,A}	30.72±0.99 ^{a,A}	48.91±1.39 ^{a,A}	47.42±2.17 ^{a,A}	85.84±4.17 ^{a,A}
		L	5.44±0.10 ^{b,A}	10.04±0.22 ^{a,A}	45.66±1.64 ^{b,A}	36.58±1.39 ^{bc,A}	55.99±1.56 ^{b,A}	68.02±3.47 ^{b,A}	103.49±2.74 ^{bc,A}
		S	5.18±0.13 ^{ab,A}	9.69±0.26 ^{Aa,A}	41.42±1.96 ^{ab,A}	34.43±1.03 ^{ab,A}	49.70±1.04 ^{a,A}	50.91±0.77 ^{a,A}	92.60±1.47 ^{ab,A}
Dec-12	YL	U	4.51±0.14 ^{a,A}	8.70±0.29 ^{a,A}	32.10±2.16 ^{a,A}	34.33±1.24 ^{a,A}	47.29±1.84 ^{a,A}	53.79±2.46 ^{a,A}	80.91±3.47 ^{a,AB}
		L	6.66±0.25 ^{c,A}	13.06±0.41 ^{b,A}	72.57±5.14 ^{c,A}	42.97±1.37 ^{b,A}	62.91±1.97 ^{c,A}	81.09±3.80 ^{b,A}	128.03±5.21 ^{b,AB}
		S	4.87±0.16 ^{ab,A}	9.41±0.22 ^{a,A}	37.77±2.02 ^{ab,A}	37.64±1.23 ^{ab,A}	51.14±1.47 ^{ab,A}	53.54±3.11 ^{a,A}	85.02±4.32 ^{a,AB}
	KM	U	4.84±0.11 ^{ab,A}	8.97±0.20 ^{a,A}	36.54±1.80 ^{ab,A}	38.01±1.51 ^{ab,A}	53.32±1.60 ^{ab,A}	73.32±4.95 ^{b,A}	101.55±6.29 ^{ab,AB}
		L	5.20±0.16 ^{b,A}	9.61±0.35 ^{a,A}	41.44±2.59 ^{b,A}	38.44±1.83 ^{ab,A}	51.13±1.74 ^{ab,A}	67.54±4.71 ^{ab,A}	103.04±5.72 ^{ab,AB}
		S	6.61±0.24 ^{c,A}	12.32±0.33 ^{b,A}	67.89±4.05 ^{c,A}	42.47±1.80 ^{b,A}	57.29±1.98 ^{bc,A}	71.92±4.00 ^{b,A}	109.14±4.82 ^{ab,AB}
Feb-13	YL	U	5.82±0.17 ^{a,B}	11.40±0.36 ^{a,B}	54.92±3.22 ^{ab,B}	49.64±1.71 ^{ab,B}	56.06±1.36 ^{ab,B}	85.66±3.55 ^{ab,B}	98.41±3.39 ^{ab,B}
		L	6.71±0.20 ^{b,B}	11.93±0.35 ^{ab,B}	66.69±3.70 ^{bc,B}	55.04±2.02 ^{b,B}	61.23±2.28 ^{b,B}	106.45±3.58 ^{c,B}	119.68±3.46 ^{c,B}
		S	6.47±0.20 ^{ab,B}	12.87±0.36 ^{a,B}	68.30±4.09 ^{c,B}	47.63±1.50 ^{a,B}	60.74±2.47 ^{b,B}	77.18±3.39 ^{a,B}	107.79±4.96 ^{abc,B}
	KM	U	5.83±0.14 ^{a,B}	10.74±0.31 ^{a,B}	51.56±2.53 ^{a,B}	44.04±1.87 ^{a,B}	52.12±2.09 ^{a,B}	76.58±3.16 ^{a,B}	92.88±3.64 ^{a,B}
		L	6.41±0.13 ^{ab,B}	11.32±0.20 ^{b,B}	59.76±2.14 ^{abc,B}	48.77±7.45 ^{ab,B}	56.46±1.37 ^{ab,B}	94.84±3.86 ^{bc,B}	114.30±3.90 ^{bc,B}
		S	6.57±0.17 ^{b,B}	11.91±0.28 ^{ab,B}	65.31±.01 ^{bc,B}	46.57±1.63 ^{a,B}	59.65±1.85 ^{ab,B}	86.20±6.41 ^{ab,B}	110.07±5.26 ^{bc,B}
May-13	YL	U	6.43±0.18 ^{b,C}	12.59±0.29 ^{b,C}	65.79±3.00 ^{b,C}	52.42±1.53 ^{cd,B}	62.46±2.41 ^{bcd,B}	106.18±3.96 ^{b,C}	126.68±4.41 ^{b,C}
		L	7.77±0.13 ^{c,C}	15.05±0.20 ^{c,C}	94.69±2.77 ^{cd,C}	57.05±1.65 ^{d,B}	66.71±1.77 ^{d,B}	138.48±4.60 ^{c,C}	157.61±4.08 ^{c,C}
		S	5.62±0.17 ^{a,C}	10.80±0.25 ^{a,C}	49.65±2.49 ^{a,C}	45.72±1.75 ^{ab,B}	53.23±2.19 ^{a,B}	81.91±3.07 ^{a,C}	96.76±3.35 ^{a,C}
	KM	U	6.94±0.14 ^{b,C}	14.51±0.39 ^{c,C}	85.85±3.87 ^{c,C}	46.17±1.62 ^{abc,B}	54.43±2.07 ^{ab,B}	108.07±1.23 ^{b,C}	115.27±1.87 ^{b,C}
		L	7.99±0.12 ^{c,C}	15.66±0.28 ^{c,C}	103.21±2.7 ^{d,C}	51.12±1.46 ^{bcd,B}	63.62±1.65 ^{cd,B}	125.25±5.00 ^{c,C}	142.87±3.25 ^{c,C}
		S	5.47±0.16 ^{a,C}	11.09±0.22 ^{a,C}	50.71±2.40 ^{a,C}	43.49±1.45 ^{a,B}	55.86±1.72 ^{abc,B}	79.24±3.57 ^{a,C}	99.43±3.55 ^{a,C}

This is a terrible table! (from one of my own papers, Kaewsrihawa et al., 2015). This is an example of information overload. The latest craze is to mark significant differences by superscript! Does it help? ³

In the Tables you are expected to:

- Accurately present the Results,
- Tables do not explain themselves. You must state what they show. There is a current fashion for using complex coding using superscripts for indicating what data is significantly different to other data. **I find these very difficult to understand and encourages writers to not explain in the text what is different to what.** Refer to the previous table.
- The more complex the Table the more likely you will make mistakes in them. **It is extremely difficult to find mistakes in Tables especially big ones.**
- **Instructions to Authors** are often very detailed about information for Figures but instructions about Tables can lack explicit details.
- Journals often edit Tables considerably to make them fit into the journal format. That means that if there are major mistakes made by the printer in your paper they are likely to be in the Tables. You may not be able to find them in the Printer's Proof.

Some things you should not do in Results Tables

- **Try to Avoid information overload.**
- Conference proceedings often have very strict space limits. This encourages squeezing all your data into one or two big Tables. When you rewrite a conference paper into a journal paper it is a good idea to divide up your tables.
- Remember that Tables do not explain themselves. You must state explicitly what they show. Avoid saying “The significant differences are shown by the subscripts in Table 1”. **No, that is not adequate.**
- Do not put Results in the Tables that are not mentioned in the text. Do not forget to talk about every single Table.
- Most journals now have **Supplementary Information** files. Put esoteric information into the **Supplementary Material**. Most Tables can go there.
- Read the **Instructions to Authors** very carefully about **format of Tables**.

References

- Beall, J. (2015) Beall's List: Potential, possible or probable predatory scholarly open-access publishers. [<http://scholarlyoa.com/publishers/>, accessed 24 Nov 2015]
- Cooper, B.M. (1975) Writing technical reports. Penquin Books, Hamondsworth, England.
- Day, RA (1998) How to Write & Publish a Scientific Paper 5th Edition. Oryx Press, Phoenix, Arizona 85012-3397 (Downloadable from Internet)
- Hodson, D. (1998) Teaching and learning science. Open University Press, Buckingham, Philadelphia.
- Kaewsrikhaw, R., Ritchie, R.J., Prathep, A (2015) Variations of tidal exposures and seasons on growth, morphology, anatomy and physiology of the seagrass *Halophila ovalis* (R.Br.) Hook.f.in a seagrass bed in Trang Province, Southern Thailand. Aquatic Botany <http://dx.doi.org/10.1016/j.aquabot.2015.12.006>
- Lanham, R.A. (1974) Style: an antitextbook. Yale University Press, New Haven & London.
- McCain, G. and Segal, E.M. (1973) The game of science. Brooks/Cole Publishing, Monterey, California.
- Sand-Jensen, K (2007) How to write consistently boring scientific literature. Oikos 116: 723727, 2007 doi: 10.1111/j.2007.0030-1299.15674.x
- Willingham, DT (2007) Critical Thinking Why Is It So Hard to Teach? American Educator 2007, 8 – 19.

