

Functional Plant Biology Editorial Report

At the start of a new year (and one year since the relaunch of *Australian Journal of Plant Physiology* as *Functional Plant Biology*), it is time to look back at some of the history of *AjPP*. In particular, I want to share with you a list I compiled recently of Citation Classics. These are papers published in previous issues that have received a very high number of citations, hence can claim to be groundbreaking papers containing novel and therefore oft-cited information.

Our top 20 Citation Classics are listed below, with the number of citations (current as of January 2003):

Coupled photosynthesis — stomatal conductance model for leaves of C₄ plants.

GJ Collatz, M Ribas-Carbo and JA Berry

AjPP **19**: 519–538 (1992) (117 citations to date)

Turgor and cell expansion — beyond the Lockhart equation.

JB Passioura and SC Fry

AjPP **19**: 565–576 (1992) (90 citations)

Xanthophyll cycle-dependent energy dissipation and flexible photosystem II efficiency in plants acclimated to light stress.

B Demmig-Adams, WW Adams, BA Logan and AS Verhoeven

AjPP **22**: 249–260 (1995) (90 citations)

Root morphology mutants in *Arabidopsis thaliana*.

TI Baskin, AS Betzner, R Hoggart, A Cork and

RE Williamson

AjPP **19**: 427–437 (1992) (89 citations)

Photoinhibition during winter stress — involvement of sustained xanthophyll-dependent energy dissipation.

WW Adams, B Demmig-Adams, AS Verhoeven and

DH Barker

AjPP **22**: 261–276 (1995) (87 citations)

Regulation of the alternative oxidase in plants and fungi.

DA Day, J Whelan, AH Millar, JN Siedow and JT Wiskich

AjPP **22**: 497–509 (1995) (82 citations)

Sensitivity of wheat phasic development to major environmental factors — a re-examination of some assumptions made by physiologists and modelers.

GA Slafer and HM Rawson

AjPP **21**: 393–426. (1994) (79 citations)

Breeding for salinity resistance in crop plants: Where next?

TJ Flowers and AR Yeo

AjPP **22**: 875–884 (1995) (63 citations)

Sink strength may be the key to growth and nitrogen responses in N-deficient wheat at elevated CO₂.

GS Rogers, PJ Milham, M Gillings and J Conroy

AjPP **23**: 253–264 (1996) (58 citations)

The effect of CO₂ enrichment and irradiance on the growth, morphology and gas exchange of a C-3 (*Panicum laxum*) and a C-4 (*Panicum antidotale*) grass.

O Ghannoum, S von Caemmerer, EWR Barlow and

JP Conroy

AjPP **24**: 227–237 (1997) (39 citations)

Carbon and nitrogen isotope discrimination and nitrogen nutrition of trees along a rainfall gradient in northern Australia.

ED Schulze, RJ Williams, GD Farquhar, W Schulze,

J Langridge, JM Miller and BH Walker

AjPP **25**: 413–425 (1998) (31 citations)

In situ study of photoinhibition of photosynthesis and xanthophyll cycle activity in plants growing in natural gaps of the tropical forest.

A Thiele, GH Krause and K Winter

AjPP **25**: 189–195 (1998) (27 citations)

The ¹⁵N-natural abundance (δ¹⁵N) of ecosystem samples reflects measures of water availability.

LL Handley, AT Austin, D Robinson, CM Scrimgeour,

JA Raven, THE Heaton, S Schmidt and GR Stewart

AjPP **26**: 185–199 (1999) (23 citations)

Is a low internal conductance to CO₂ diffusion a consequence of succulence in plants with crassulacean acid metabolism?

K Maxwell K, S von Caemmerer and JR Evans

AjPP **24**: 777–786 (1997) (22 citations)

The interplay between limiting processes in C-3 photosynthesis studied by rapid-response gas exchange using transgenic tobacco impaired in photosynthesis.

S Ruuska, TJ Andrews, MR Badger, GS Hudson, A Laisk,

GD Price and S von Caemmerer

AjPP **25**: 859–870 (1998) (16 citations)

The role of biomass allocation in the growth response of plants to different levels of light, CO₂, nutrients and water: a quantitative review.

H Poorter and O Nagel

AjPP **27**: 595–607 (2000) (18 citations)

Insights into the consequences of grana stacking of thylakoid membranes in vascular plants: a personal perspective

JM Anderson

AjPP **26**: 625–639 (1999) (13 citations)

Sieve element and companion cell: the story of the comatose patient and the hyperactive nurse.

AJE van Bel and M Knoblauch

AjPP **27**: 477–487 (2000) (10 citations)

Nitrogen deficiency precludes a growth response to CO₂ enrichment in C-3 and C-4 *Panicum* grasses

O Ghannoum and JP Conroy

AjPP **25**: 627–636 (1998) (10 citations)

An experimental and modeling study of responses in ecosystems carbon exchanges to increasing CO₂ concentrations using a tropical rainforest mesocosm.

GH Lin, BDV Marino, YD Wei, J Adams, F Tubiello and

JA Berry

AjPP **25**: 547–556 (1998) (10 citations)

The authors of these papers are congratulated for their work, and thanked for choosing to publish in *AjPP*.

Which model for Plant Science publishing?

There are currently over 130 journals listed in the 'Plant Sciences' category with the ISI. These journals have a range of editorial and management models and styles, ranging from the 'academic Editor-in-Chief supported by an Editorial Office' model (e.g. *Annals of Botany*, *Plant, Cell & Environment*) to the 'Managing Editor in the Production Office' model (e.g. *FPB*). Both models enlist the support of wide international Editorial Panels. I believe the beauty of a dedicated Managing Editor (i.e. one whose sole duty it is to receive, handle and accept or reject manuscripts, with no University or research commitments) is the high level of personal service and attention that authors receive. For example, turnaround time from receipt of a new manuscript to return of the reviewers' reports at *FPB* is currently six weeks. Except for the occasional short vacation (and forthcoming honeymoon!), and brief trips out of the office to meet authors and reviewers at plant science conferences, 100% of my time is dedicated to handling your manuscripts, and I sincerely hope that the personal and detailed attention I give you as authors and reviewers encourages you to continue submitting your best manuscripts to *FPB*.

Best wishes in all your endeavours in 2003.



Dr Jennifer McCutchan
Managing Editor