



Australian
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Leaf nitrogen budgets

Wednesday 23 May 2013, 1pm

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Slatyer Seminar Room, R.N. Robertson Building (Bldg. 46), Linnaeus Way, ANU



Nitrogen is the most abundant element plants acquire from the soil. In natural ecosystems, nitrogen gained through biological nitrogen fixation and atmospheric deposition exceeds that lost back to the atmosphere or leached, which leads to an increase in nitrogen over time. In agricultural cropping systems, large amounts of nitrogen fertiliser are applied to sustain the removal of nitrogen in the harvested product. It is thought that globally, the anthropogenic nitrogen cycle now exceeds the natural nitrogen cycle. Leaves account for the majority of nitrogen in a plant and most of that nitrogen is devoted to the process of photosynthesis. However, growth and survival place opposing demands on how plants should invest their nitrogen. This has resulted in different solutions, but can generalisations be made? Such understanding can be applied to modelling terrestrial photosynthesis from satellite imagery and simple leaf parameters averaged for different vegetation types. It may also provide a useful constraint when designing improvements to crop photosynthesis.

Presented by

Research School of
Biology

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& Environment

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This lecture is free and open to the public

Plant Science Seminar Series information:

<http://biology.anu.edu.au/News/events-ps.php>

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