

T H E
PLANT
C E L L

Volume 32 Number 3 March 2020

The electronic form of this issue, available at www.plantcell.org, is the journal of record.

ON THE COVER



O'Leary et al. (pp 666-682) assesses metabolic processes in leaves at night and the role of TOR signalling in fuelling respiration to maintain ATP for maintenance and growth of leaves. When amino acid levels are high, TOR is activated which subsequently downregulates the mitochondrial respiratory pathways consuming amino acids as fuel, and upregulates protein synthesis, thus using amino acids for growth. So we now know that plants use TOR to sense the levels of both sugars and amino acids in plant cells and coordinate downstream energy generating or utilizing processes. The image shows leaves of a tree at night lit by the light of the moon. Photo Credit: Pxhere (CC0)

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Plant BiologistsExecutive Director,
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Rockville, Maryland 20855-2768

Telephone: 301/296-0908

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The Plant Cell (eISSN 1532-298X) is published monthly (one volume per year) by the American Society of Plant Biologists, 15501 Monona Drive, Rockville, MD 20855-2768, and is produced by Dartmouth Journal Services, Waterbury, VT. The institutional subscription price is based on type of institution; contact institution@aspb.org. Members of the American Society of Plant Biologists may subscribe to *The Plant Cell* for \$240. Nonmember individuals may subscribe for \$500. Students may subscribe for \$165. For matters regarding subscriptions, contact Suzanne Cholwek, ASPB, 15501 Monona Drive, Rockville, MD 20855-2768; telephone 301/296-0926; fax 301/251-6740; e-mail scholwek@aspb.org. Send all inquiries regarding display advertising to FASEB AdNet, 9650 Rockville Pike, Bethesda, MD 20814-3998; telephone 301/634-7791; fax 301/634-7153; e-mail adnet@faseb.org. The online version of *The Plant Cell* is available at www.plantcell.org.

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