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On the Cover: A canopy of rye (*Secale cereale*) growing at the Plant Breeding Institute (Cambridge, UK). Leaves are displayed in an array that distributes sunlight across a surface much greater than the land area. Carbon dioxide uptake requires gas exchange between surrounding air and the intercellular airspaces through stomatal pores and the inevitable loss of water via transpiration. Breeding tries to maximize the allocation of the products of photosynthesis into the harvested organ, in this case the grain. Photo taken by John R. Evans.

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^[W] Indicates Web-only data.

^[OA] Open Access articles can be viewed online without a subscription.