

# ***AMERICAN SCIENTIST***

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## THE COVER

*Algae frequently are heralded as future feedstocks for biofuel, alternatives to the fossil fuels that so much of the world depends on even though their combustion keeps pumping greenhouse gases into Earth's atmosphere. The freshwater algae *Botryococcus braunii*, shown on the cover, are one type of microalgae that attract a lot of interest because of their adaptability and their relatively high lipid content. Found in environments as diverse as continental, temperate, alpine and tropical climate zones, the species is a particularly adept producer of hydrocarbons. As Philip T. Pienkos, Lieve Laurens and Andy Eden explain in "Making Biofuel from Microalgae" (pages 474-481), multiple scientific, environmental and economic challenges must be overcome before algae-based fuels bloom into a large-scale energy source. (Photography by Roland Birke/Oxford Scientific.)*