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SCIENCE is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Second-class postage (publication No. 484460) paid at Washington, D.C., and at an additional entry. Now combined with The Science Monthly © 1982 by the American Association for the Advancement of Science. Domestic individual membership and subscription ($1 issues): $48. Domestic institutional subscription ($1 issues): $85. Foreign postage extra: Canada $24, other (surface mail) $27, air-surface via Amsterdam $55. First class, airmail, school-year, and student rates on request. Single copies $2.50 ($3 by mail); back issues $3 ($3.50 by mail); classroom rates on request. Change of address: allow 6 weeks, giving old and new addresses and seven-digit account number. Postmaster: Send Form 3579 to Science, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005. Science is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.
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Flying at 50 meters per second, low-flying aircraft are equipped with recently developed analytical sensors which make possible an accurate and rapid estimate of crop growth, health, and ultimate yield over large areas. Calculations are based on the measurement of carbon dioxide and vertical wind speed at 10 to 30 meters above the growing crop. See page 733. [Research Program Service, Research Branch, Agriculture Canada, Ottawa, Ontario, Canada]