



HIGHLIGHTS

of

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Preview: Global Status of Commercialized Biotech/GM Crops: 2004

by

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The Brief was released on 12 January 2005. ISAAA Brief 32 characterizes the global status in 2004 of commercialized transgenic or GM crops, now often called biotech crops, as referred to consistently in the Brief. The focus on developing countries is consistent with ISAAA's mission to assist developing countries in assessing the potential of biotech crops. The principal aim, is to present a consolidated set of data that will facilitate a knowledge-based discussion of the current global trends in biotech crops.

- Brief 32 provides the most recent data on biotech crops globally for 2004, and confirms that the global biotech crop area continued to grow for the ninth consecutive year at a sustained double-digit rate.
- In 2004, the global area of biotech crops continued to grow at a substantial rate of 20%, compared with 15% in 2003.
- The estimated global area of approved biotech crops for 2004 was 81.0 million hectares, equivalent to approx. 200 million acres, up from the 67.7 million hectares or 167 million acres in 2003.
- In 2004, 5% of the 1.5 billion hectares (3.7 billion acres) of all global cultivable cropland was occupied by biotech crops.
- Biotech crops were grown by 8.25 million farmers in 17 countries in 2004, up from 7 million farmers in 18 countries in 2003. Notably, 90% of the beneficiary farmers were resource-poor farmers from developing countries, whose increased incomes from biotech crops contributed to the alleviation of poverty.
- The increase in biotech crop area between 2003 and 2004, of 13.3 million hectares or 32.9 million acres, is the second highest on record.
- In 2004, there were fourteen biotech mega-countries (countries growing 50,000 hectares -125,000 acres - or more, of biotech crops), compared with ten in 2003 - 9 developing countries and 5 industrial countries; they were, in order of hectareage/acreage, USA, Argentina, Canada, Brazil, China, Paraguay, India, South Africa, Uruguay, Australia, Romania, Mexico, Spain and the Philippines.
- During the period 1996-2004 the accumulated global biotech crop area was 385 million hectares or 951 million acres (almost 1 billion acres), equivalent to 40% of the total land area of the USA or China, or 15 times the total land area of the UK.
- The continuing rapid adoption of biotech crops reflects the substantial improvements in productivity, the environment, economics, health and social benefits realized by both large and small farmers, consumers, and society in both industrial and developing countries.
- During the nine-year period 1996 to 2004, global area of biotech crops increased more than 47 fold, from 1.7 million hectares (4.2 million acres) in 1996 to 81.0 million hectares (approx. 200 million

acres) in 2004, with an increasing proportion grown by developing countries. More than one-third (34%) of the global biotech crop area of 81 million hectares (200 million acres) in 2004, equivalent to 27.6 million hectares (68 million acres), was grown in developing countries where growth continued to be strong.

- The increased hectareage/acreage and impact of the five principal developing countries (China, India, Argentina, Brazil and South Africa) growing biotech crops, is an important trend with implications for the future adoption and acceptance of biotech crops worldwide; Brief 32 has biotech overviews for each of the five countries. In 2004, the number of developing countries growing biotech crops (11) was almost double the number of industrial countries (6) adopting biotech crops.
- 2004 is the penultimate year of the first decade of the commercialization of biotech crops, during which double-digit growth in global hectareage of biotech crops has been achieved every single year; this is an unwavering and resolute vote of confidence in the technology from the 25 million farmers, who are masters in risk aversion, and who have consistently chosen to plant an increasing hectareage of biotech crops year after year, during the period 1996 to 2004.
- The 10th anniversary in 2005, will be a just cause for celebration worldwide by farmers, the international scientific and development community, global society, and the peoples in developing and industrial countries on all six continents that have benefited significantly from the technology, particularly the humanitarian contribution to the alleviation of poverty, malnutrition and hunger in the countries of Asia, Africa and Latin America.
- For the future, there is cause for cautious optimism with the global area and the number of farmers planting biotech crops expected to continue to grow in 2005 and beyond. There were signs of progress in the European Union in 2004 with the EU Commission approving, for import, two events in biotech maize (Bt 11 and NK603) for food and feed use, thus signaling the end of the 1998 moratorium. The Commission also approved 17 maize varieties, with insect resistance conferred by MON 810, making it the first biotech crop to be approved for planting in all 25 EU countries. The use of MON 810 maize in conjunction with practical co-existence policies opens up new opportunities for EU member countries to benefit from the commercialization of biotech maize, which Spain has successfully deployed since 1998.
- In the near term, the one single event that is likely to have the greatest impact is the approval and adoption of Bt rice in China, which is considered to be likely in the near term, probably in 2005. The adoption of biotech rice by China not only involves the most important food crop in the world, but the culture of Asia as well. It will provide the stimulus that will have a major impact on the acceptance of biotech rice in Asia and, more generally, on the acceptance of biotech food, feed and fiber crops worldwide. Taking all factors into account, the outlook for 2010 points to continued growth in the global hectareage of biotech crops, up to 150 million hectares (375 million acres), with about 15 million farmers growing biotech crops in up to 30 countries.

Information about ISAAA and the author

A not-for-profit public charity, cosponsored by the public and private sectors, working to alleviate poverty in developing countries, by facilitating the transfer and sharing of crop biotechnology applications to increase crop productivity and income generation, particularly for resource-poor farmers, and to bring about a safer environment and more sustainable agricultural development. ISAAA is a small International Network with a global hub in the Philippines and centers in Nairobi, Kenya, and at Cornell University, Ithaca, New York, USA. Clive James, chairman and founder of ISAAA, has lived and worked for the past 25 years in the developing countries of Asia, Latin America and Africa, devoting his efforts to agricultural research and development issues with a particular focus on crop biotechnology and its contribution to global food security.

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