Bayer and Exelixis Joint Venture, Genoptera, is First to Sequence Heliothis Moth Genome

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Achievement Advances Goal of Developing Safe, More Innovative Insecticides

Bayer AG (NYSE: BAY) and Exelixis, Inc. (Nasdaq: EXEL) announce that they have completed the genome sequencing project of a lepidopteran species, Heliothis virescens, an economically important insect pest commonly known as the tobacco budworm. The sequencing breakthrough provides, for the first time, nearly complete analysis of the genes of a lepidopteran species. The sequencing feat was achieved by Genoptera LLC, the two companies' ongoing crop protection joint venture, and has the potential to accelerate and streamline the development of safe, more innovative insecticides.

Heliothis is of particular interest to agrochemical companies in the competition to identify novel, highly selective molecular targets for insecticides. Until now, scientists had relied on Drosophila melanogaster, the common fruit fly, as a model system from which to extrapolate information about what gene products or proteins could be relevant insecticide targets. Armed with the Heliothis sequence, and combining Exelixis' and Bayer's expertise, Genoptera has begun delivering Heliothis targets and assays to Bayer. Because the assays are based on the pest species itself, they could lead to more rapid discovery of novel, more potent and more specific insecticides.

"The joint venture Genoptera has been highly successful and Bayer is extremely pleased that the alliance with Exelixis has achieved another significant milestone," said Detlef Wollweber, head of crop protection research at Bayer. "We believe that sequencing Heliothis will allow us to identify new targets and insecticidal compounds more rapidly and thus strengthen our competitive advantage. Bayer is a leader in using innovative technologies in crop protection research for the development of novel, selective insecticides and products with new mechanisms of action."

"For the first time, scientists will have state-of-the-art tools with which to identify and screen important genetic targets derived directly from the agriculturally relevant insect rather than from a closely-related model system," said George A. Scangos, Ph.D., president and chief executive officer of Exelixis. "The success of this alliance is based on the productive interaction between the two companies. By combining Exelixis' premier sequencing and comparative genomics expertise with Bayer's superior agricultural discovery platform, we believe that we have achieved a major milestone in the effort to develop important new crop preservation and enhancement products."

The Heliothis sequencing project, which took about one year to complete, was performed at Exelixis and employed a methodology designed for maximum efficiency. By combining the strategies of sequencing expressed sequence tags (ESTs) with a so-called "shot-gun" sequencing of genomic DNA, Genoptera scientists were able to identify approximately 90% of the estimated Heliothis genes. Drawing on past experience with Drosophila, scientists at Exelixis were able to use proprietary sophisticated statistical and bioinformatics tools to correlate moth genetic sequence information with fly genetic sequence information, rapidly compare the two genomes and identify common and different genes. In addition to identifying many potentially high value targets that will remain proprietary to Genoptera, the analysis also yielded new insights into the size, organization and gene content of the moth genome. The ultimate goal of the effort is to enable Bayer, the worldwide commercial leader in insecticide products, to use this information to discover and develop novel crop protection products that meet environmental requirements and have a high degree of commercial potential.

To view an image of the Heliothis moth, please click here: http://www.exelixis.com/img/helio.jpg .

Genoptera LLC is an Exelixis-Bayer joint venture with the aim of identifying novel targets and providing assays for the discovery of new crop protection substances, in particular the discovery of novel insecticides and nematicides. The 2000 joint venture included a $20 million up-front payment and performance-based milestone and royalty payments to Exelixis as well as $80 million in research funding over the course of the eight-year joint venture. For more information, please visit www.genoptera.com.

Bayer is an international, research-based group with core businesses in health care, agriculture, polymers and specialty chemicals. In 2001 Bayer had sales of EUR 30.3 billion, net income of EUR 965 million, and approximately 117,000 employees at year-end. Capital expenditures amounted to EUR 2.6 billion, R&D spending to EUR 2.5 billion. For more information, please visit www.bayer.com.

Exelixis, Inc. is a leading genomics-based drug discovery company focused on product development through its expertise in comparative genomics and model system genetics. These technologies provide a rapid, efficient and cost effective way to move from DNA sequence data to knowledge about the function of genes and the proteins they encode. The company's technology is broadly applicable to all life sciences industries including pharmaceutical, diagnostic, agricultural biotechnology and animal health. Exelixis has partnerships with Aventis CropScience, Bayer, Bristol-Myers Squibb, Elan Pharmaceuticals, Pharmacia, Protein Design Labs, Schering-Plough Research Institute, Scios Inc. Dow AgroSciences and Cytokinetics, Inc. and is building its internal development program in the area of oncology. For more information, please visit the company's web site at www.exelixis.com.

This press release contains certain forward-looking statements that involve risks and uncertainties that may affect our business, as more fully discussed in the "Risk Factors" section of our filings with the U.S. Securities and Exchange Commission. These risks and uncertainties include, but are not limited to, our ability successfully to collaborate and identify novel targets from the collaboration. Exelixis directs the reader to its SEC filings,

including its Annual Report on Form 10-K for the year ended December 31, 2001. The information in this press release is current as of its release date. Exelixis assumes no responsibility to update the information.

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