

Latest acquisition

On 21 March 2000 BASF AG announced that it had agreed to acquire the Cyanamid crop protection business of American Home Products Corporation (AHP) of Madison, New Jersey, USA, for about \$3.8 billion.

Through this acquisition, BASF will more than double its annual crop protection sales, which were about \$1.9 billion in 1999, and will move up to the top ranks of the world's leading crop protection manufacturers.

This acquisition, which still requires approval from relevant governmental antitrust authorities, is scheduled to be completed by 1 July, 2000. It will enable BASF to expand its traditional strengths in crop protection – it will now have a pipeline of 15 active ingredients expected to be launched by 2006. It will also strengthen BASF's position in North and South America.

AHP will now focus on their pharmaceutical, biopharmaceutical, consumer health care and animal health products businesses.

For more information see <http://www.basf-ag.basf.de>

Monsanto to supply herbicide to DuPont

Monsanto has agreed a deal to sell glyphosate to DuPont for use in some of its herbicide formulations in the US. The deal runs to 2005 and allows the use of DuPont-branded glyphosate products on Roundup Ready cotton and soybean crops. The US patent on glyphosate expires in 2000 and Monsanto has drawn up licensing and supply deals with most major herbicide rivals. It has also increased its capacity, reduced prices and improved its glyphosate cost position in attempts to deter rivals from erecting capacity.

Bayer joint venture with Exelixis

Bayer has expanded its agbiotech research and development alliance with Exelixis Pharmaceuticals Inc. of San Francisco to set up a joint venture called GenOptera, which will develop new generations of insecticides and nematocides using Exelixis' genetic engineering processes. GenOptera will receive at least \$80 M in research support, and Bayer will also pay \$20 M for licensing

rights for the genetic technologies. Bayer will have exclusive rights to commercialise insecticides that GenOptera develops.

Paradigm Genetics collaboration with Monsanto

Paradigm Genetics Inc (Paradigm) has signed a broad collaboration agreement with Monsanto Co in the field of functional genomics. Under the terms of the agreement, Paradigm will develop functional genomics data by analyzing the product of Monsanto's gene sequencing, bioinformatics and functional genomics research, creating a product discovery platform for commercialization. Under terms of the agreement, Paradigm will receive \$55 M in committed payments (<http://www.paradigmgenetics.com>)

DESSAC

A new company, Dessac International Ltd., initially based at Rothamsted Experimental Station, Hertfordshire, UK, has been set up to commercialise DESSAC (Decision Support System for Arable Crops). DESSAC has been developed under the LINK Programme on Technologies for Sustainable Farming Systems funded by the Ministry of Agriculture, Fisheries and Food (MAFF), the Home-Grown Cereals Authority (HGCA) and the Biotechnology and Biological Sciences Research Council (BBSRC) as an integrated suite of decision support systems to assist arable farmers and advisers with a whole range of crop husbandry decisions. It analyses the consequences of a variety of actions, for example, different spraying dates and different doses, and show users the likely results in terms of effectiveness, costs *etc.* They can then make an informed choice from the options presented. It also means that new information, e.g. on new research, new varieties, can be made available to the farmer or advisers much more quickly. DESSAC was developed as an expandable system consisting of a central core to which decision support modules are added. The central core of the system contains common information relevant to the whole range of crop husbandry decisions, (e.g. existing farm records, weather data and general cropping information). Each decision support module provides help on a different aspect of crop husbandry by

providing book-style information specific to that decision as well as providing analysis of the probable effects of different treatment plans. The system, whose development was funded chiefly by the MAFF and HGCA, will enable UK growers to combine their own farm information with the latest scientific findings to aid them in their decision-making processes, both from crop and financial viewpoints.

Agribusiness e-commerce site

DuPont Company, Cargill Inc. and Cenex Harvest States plan to launch by 1 May 2000 an Internet hub website to bring US farmers, farm suppliers and foodmakers into a virtual marketplace, Rooster.com. The 3 companies will own equal shares in the new e-commerce site, which will enable farmers to market their crops and buy fertilizer, crop protection products, other farm supplies and equipment. Farmers will also find news and weather, discussion forums and services in www.Rooster.com.

GMOs and Monsanto/Pharmacia and Upjohn

In a move to calm shareholders ahead of their forthcoming merger, Monsanto and Pharmacia and Upjohn have offered to reduce a \$600 M research and development budget for genetically modified (GM) foods. The new company will be renamed Pharmacia, an indication that the company intends to distance itself from the controversial Monsanto GM business. Since the agreement was announced shares have plummeted as shareholders criticised the companies' decision to retain up to 80% of Monsanto's agrochemicals and GM business.

Novartis launches pymetrozine formulation in the UK

Novartis has launched Plenum (pymetrozine) in the UK for aphid control on potatoes. Pymetrozine is a highly selective, systemic insecticide with excellent efficacy against a broad range of aphid species on a wide variety of cropping systems. It belongs to a new chemical class known as pyridine azomethines. It exhibits a unique mode of action which can be characterised as neural inhibition of feeding behaviour: Affected insects stop feeding

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within a few hours after exposure, which results in mortality due to starvation or desiccation after several days. Pymetrozine has excellent potential for use in integrated pest management and resistance management programs because of its low use rate, unique mode of action, selectivity, and safety to predators, parasites and other beneficial insects and mites. The company is seeking approval for the insecticide in other European markets, including France, Germany, Italy and Spain.

Nufarm moves primary stock market listing from New Zealand to Australia

NuFarm has changed its name from Fernz Corp and moved its primary stock market listing from New Zealand to Australia. The move onto the Australian Stock Exchange should improve the price to earnings ratio of this A\$500 M company. The company has 10% of its sales in New Zealand and about 40% in Australia. Nufarm is the second biggest supplier of agrochemicals in Australia, with about 20% of the market. It also exports to Asia, Europe and North America.

CropGen

Aventis CropScience, Dow AgroSciences, Monsanto and Novartis Seeds have set up a scientific panel with £500,000 funding for its first year, to be called CropGen, "to help achieve a more balanced debate about genetically-modified crops." The sponsors have signed an undertaking that they will not veto any of the scientific positions taken by the panel. The members of the panel includes specialists in agriculture, plant science, microbiology and ecology, and also in consumer affairs; none works for any of the sponsoring companies, and they will only be paid "an honorarium in rates recommended by professional bodies". They say they "will make the case for crop biotechnology, not the biotechnology industry". The panel is chaired by Vivian Moses, visiting professor of biotechnology at King's College, London.

CropGen is supporting the next phase of GM trials which received UK government approval on 10 March 2000. They say that the proposed farm-scale trials will provide extra UK evidence of the effects, if any, of GM crops on biodiversity, and have spoken

out strongly against those environmental campaigners who seek to stop such trials taking place. They claim that in trials so far GM crops have needed up to a third less pesticides than conventional crops and this could reduce farmers' over-dependence on chemicals, to the benefit of the environment (<http://www.cropgen.org/>)

DuPont-Affymax discovery deal

Affymax, a subsidiary of Glaxo Wellcome, is to grant DuPont access to Glaxo's chemical libraries for testing potential agrochemicals. Affymax will receive testing payments, and potential milestone and royalty payments. Affymax is having discussions with other pesticide producers and another deal is expected to be announced in summer. DuPont will gain access to 2.4 M compounds that Affymax has already evaluated as drugs, as well as libraries that the agriculture unit has itself built up. Affymax is adding 1 million compounds per year. DuPont recently boosted its combinatorial chemistry activities with the \$95 M acquisition of CombiChem.

Rice genome code

Researchers at the University of Washington in Seattle, USA, working under contract for Monsanto, have finished the first "working draft" of the rice genome – it represents roughly 85% of the genetic code. Monsanto has said that it will make this research public through the International Rice Genome Sequence Project (IRGSP), an international research consortium of 10 research teams working to complete the sequencing of the rice genome (see *Pesticide Outlook* 1999, 10(3), 114). Other researchers will also have access via the Internet, although Monsanto will retain the right to licence any developments based on its own research.

BioFocus expansion

BioFocus plc announced on 9 March 2000 that it had signed a major international collaboration with Aventis CropScience to design and supply compounds for the latter's R&D programmes. To carry out this work and allow for further expansion in the future, BioFocus will take over a modern self-contained unit of chemistry laboratories at Chesterford Park, Saffron

Walden, UK.

Since the launch of BioFocus three years ago, the UK-based company, based at the Sittingbourne Research Centre in Kent, UK, has successfully entered into a number of agreements with a wide range of companies in Europe, the USA and Japan, including Pharmacia & Upjohn, Glaxo Wellcome, Roche and Parke Davis. The company provides integrated chemistry services for the pharmaceutical, biotechnology and agrochemical industries, specialising in high-quality lead generation and lead optimisation solutions. Its major current developments are Predictive Array Design™, a novel method for the design of smaller, more data-efficient libraries and PharmaScape™, a 'toolbox' of synthetic chemistry protocols and associated scaffold and monomer structures. As a result of this expansion BioFocus now employs more than 60 people (<http://www.biofocus.com>).

Snippets

... Abbott Laboratories has completed the sale of its agricultural products business to Sumitomo Chemical Co Ltd. The business will be run by a new company called Valent Biosciences Corp, and will operate in the areas of agriculture, forestry and public health.

... Huntingdon Life Sciences is entering into a collaboration with Pesticides Manufacturers and Formulators Association of India (PMFAI). The new alliance will enable Indian pesticide manufactures to export pesticides to the 15 European Union countries and will help Huntingdon Life Sciences to establish strong business relations with India.

... by the end of 2000, the sale of American Cyanamid by American Home Products (AHP) is due to be completed, although potential buyers have not been disclosed. They are believed to include Bayer, BASF, DuPont and Dow Chemical. AHP will concentrate on its pharmaceutical and health care operations.

... Sorex Ltd. of Widnes, UK, has acquired the European rights to Zeneca's three rodenticide brands, Klerat (brodifacoum), Talon (brodifacoum) and Ratak (difenacoum), as well as the public health insecticide Demand (lambda-cyhalothrin).