MANAGEMENT SHIFTS ABOUND IN PLANT GENETICS

NEW YORK—Although high turnover and revised corporate strategies are endemic in developing industries, the number of such changes in plant genetic engineering companies over the past year has been unusual.

Some experts view this as a sign that the field is maturing, some that original misconceptions about the costs and time-frames of bringing products to market are being reevaluated. "It simply reflects the state of development," says Joe Key, executive vice president and chief scientific officer of Agrigenetics Corp. (Boulder, CO). "People who were superb at one stage may not be so good at moving toward the next step." At any rate, the comings, goings, and reorganizations are enough to make it tough for people trying to follow the field.

Corporate takeovers—such as Lubrizol's purchase of Agrigenetics, J. G. Bonner's buyout of Phytogen, and W. R. Grace's joint venture with Cetus Corp. that includes what used to be Cetus Madison-have gotten most of the headlines over the past year. Changeovers in the president or chief operating officer slot of agricultural genetics companies, however, have made up a quieter, more pervasive trend. According to Jack Hesse, managing partner of Plant Resources Venture Fund, "It had to reach a point where these companies had to seek out business leadership that had general management experience and experience within the industry they are about to serve."

Last spring, for example, Thomas M. Dyott left Rohm & Haas (Philadelphia, PA) to take over the newly created posts of president and chief operating officer at Advanced Genetic Sciences (Greenwich, CT). "The development of the business necessitated bringing in a chief operating officer," says Daniel P. Adams, founder and chairman of the 5-year-old firm. AGS recently closed its operations in Manhattan, KS, and has consolidated research into its new Berkeley, CA, facilities. The company is now marketing its first product, a Pseudomonas syringae formulation tradenamed "snomax" that increases the ability of ski resorts to manufacture snow in warm conditions.

Also last spring, Sim Fass assumed the role of president and chief executive officer of Biotechnology General Corp. (New York, NY), replacing Richard P. Lyman, who became vice chairman of the board. The company is seeking to reorganize its plant busi-

ness, and may spin off this section of research into a new subsidiary.

Biotechnica International (Cambridge, MA), which hopes to have its Rhizobium nitrogen-fixing bacteria available in 1986, now finds itself in search of a president—a new position for the company. "We're starting to get into a scale-up mode, and eventually into production and marketing of products," says chief financial officer Donald Pett. "We felt there was a need to oversee operations at that level." Biotechnica also recently formed an affiliate company in the United Kingdom, Biotechnica Ltd., which will address European markets and do R&D in environmental microbiology.

Sungene Technologies Corp. (Palo Alto, CA) is another company enduring management transition and growing pains. President Thomas Hiatt left the firm last summer due to philosophical differences with the board of directors. He was replaced on an interim basis by Doug McConnel, who is chairman of the executive committee. Sungene, which focuses on cereal grains and oil seeds, completed a second round of venture capital financing last summer.

At Calgene (Davis, CA), the new president and chief operating officer is Roger Salquist. He replaced Norman M. Goldfarb, who continues as chairman and chief executive officer. "We've turned to someone who has a

very strong marketing focus," says Robert M. Goodman, Calgene's vice president of research and development. Previously, he says, the scientists themselves were handling most of Calgene's administrative tasks. "There have been no major strategic changes," Goodman stresses, "although we're prepared for the likelihood that the changes we've made will change perceptions in the outside world about what we're doing." Under its latest agreement, Calgene and Campbell Soup Co. are now pooling their genetic engineering and breeding expertise to develop high solids tomatoes.

Plant Genetics (Davis, CA) also made a shift toward marketing experience when it replaced president Gary Hudson with Zachary S. Wochok, who had been with Monsanto. Last year the company trimmed down its crop projects to emphasize the ones that will produce revenues in the near term. It is also concentrating on gel encapsulation of plant embryos to increase germination. In an effort to get its name recognized by potential buyers, the company is now selling hybrid tomato seeds and potato spuds; next year it plans to market its own brands. "What became necessary was a refocusing of all our programs," says Wochok. "The company was going from a no-sales company into a marketing and sales orientation." -Arthur Klausner

MEETING REPORT

CORNELL GETS \$22 MILLION FOR BIOTECH CENTER

ITHACA, N.Y.—Cornell University held its second annual biotechnology symposium this fall amid excitement surrounding new funding for biotech research here. At a trustees meeting a week earlier, New York Governor Mario Cuomo announced that he will recommend the appropriation of \$22 million for the construction of a new biotechnology facility at Cornell. The structure will house the New York State Center for Advanced Technology in Agricultural Biotechnology, which Cornell won last year-partially due to substantial financial commitments from Eastman Kodak (Rochester, NY), General Foods Corp. (White Plains, NY), Union Carbide Corp. (Danbury, CT), and Corning Glass Works (Corning, NY). The institute

will receive federal and foundation grants totaling \$8.5 million per year and annual private-sector contributions of over \$3.8 million. Officials expect that research at the center will create about 200 new jobs and spawn a dozen or so small firms.

At the conference, which focused on biotechnology in agriculture and economic development, keynote speaker Peter Day of Cornell's Plant Breeding Institute discussed the features of plant breeding that make direct applications of biotechnology difficult. He emphasized the differences in outlook between the research scientist and the traditional plant breeder. "The level of organization at which the two scientists speak leads to barriers which can only be bridged by