

Enjoy A Papaya—Thanks To Biotech

(NAPSA)—A slice of papaya with a sprinkle of lime has become one of the hottest treats of the summer of 2001. But if not for biotechnology, papayas would be scarce—and Hawaiian papaya farmers would be a memory.

In 1993, the Papaya Ringspot Virus (PRSV) began attacking papaya plantations throughout the state of Hawaii. This highly contagious disease spread quickly from farm to farm threatening a \$45 million-a-year industry—as well as the farmers' way of life.

By choking off a tree's ability to feed itself, the virus stunts its growth and makes its fruit inedible. In the long term, the tree literally starves to death. Because the virus is highly contagious, the only way to even attempt to limit its spread is to destroy infected trees.

There was no cure and, it appeared that, the papaya crop in Hawaii and, eventually, around the world was in serious danger. Papaya production in Hawaii declined from 58 million pounds in 1993 to 36 million in 1997. It appeared to be only a matter of time before Hawaiian papaya farms were wiped out and the papaya itself became an endangered species. Then biotechnology researchers came to the rescue.

Researchers at Cornell University and the University of Hawaii worked together to develop papaya seeds with a built-in resistance to the virus. Their solution was to add to papayas a specific gene that would function much the way a flu-shot does to help protect a human against influenza. Aside from that single new trait, the virus-resistant papayas they developed have the



exact same taste, texture and nutritional content as other varieties of papayas.

The PRSV-resistant papaya also is as safe to eat as other papayas. In 1997, after vigorous review by three federal agencies—the Food and Drug Administration, the U.S. Department of Agriculture and the Environmental Protection Agency—the biotech-enhanced papayas were approved for human consumption.

Over the past three years, biotech papaya plants have proved wildly successful. According to the Hawaiian Agricultural Statistics Service, by 1999, papaya production had increased to 42.4 million pounds—and it has been continuing to increase since.

More and more people understand that biotechnology is a tool that can help grow more food for a hungry world, protect the environment and provide more nutritious foods for more people. But sometimes it can also save plants—and farmers—while giving lots of folks a tasty, healthy, juicy summertime treat in the bargain.