Abstract:

The rapid advent of biotechnology has opened a New World of opportunities in agriculture. But while the potential of biotechnology could seem limitless, we have to keep in mind that there are in fact practical limitations to the technology. One of the main factors limiting this new approach is the lack of fundamental understanding of many basic plant processes. Due to the importance of many agricultural problems there is a rush to use gene manipulation in order to find quick solutions to old problems. Unfortunately we have discovered that gene manipulation often leads to unexpected results. Developing countries have the strongest potential to benefit from agricultural biotechnology but they also face risks associated with the lack of experienced personnel.

Biotechnological approaches to control post-harvest life of tropical fruits have the potential to extend the useful shelf life of the fruit, even though it will need to be combined with a set of cultural, horticultural and commercialisation practices. A number of factors of critical importance for projects involving the control of fruit ripening-induced by ethylene are discussed.