

Title Pre and postharvest data collecting system using the compact NIR analyzer
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Abstract

The development of a portable near infrared spectroscopic analyzer for outdoor use began in 1996. The Fruit-Tester-20 (FT-20) was developed in 1998. This device has fulfilled the needs for outdoor use such as small size, lightweight, one-body, rechargeable battery, weather resistant and easy data handling. The FT-20 is composed of a spectroscope, CPU board, indicator, memory card, lighting device, optical fiber, battery and charger in one box weighing about 4 kg. A new model was developed in 2003. This NIR spectroscopic analyzer called the FQA-NIRGUN is the most compact NIR analyzer on the worlds market. The weight of the FQA-NIRGUN is only 750 g, which allows it to be handled on the tree in an orchard. The NIR data can be transferred to a personal computer using an RS232C interface. Several research institutions and fruit industries have introduced the FQA-NIRGUN to collect physiological data or quality control data on site.