

Abstract:

The harvest time of melon is usually decided by days after crossing. However, the decision of the harvest time is not easy in case cultivation conditions are different, not easier in case it is difficult to judge harvest time with external appearance. The firmness of a netted melon cultivar was measured using a nondestructive method. Namely, transmission velocity (m/s) was measured. Transmission velocity is slower, as fruit ripens. When the fruit was mature and especially when it was sunny, the transmission velocity was slower. When the transmission velocity was measured below 80 m/s twice, the sucrose content was amounted to more than 8.5 %, indicating the maximum content. On the other hand, the total content of glucose and fructose was unchanged. As a result, it was concluded that transmission velocity could decide the harvest time of melon fruit nondestructively.