

Abstract:

Red Delicious apples have been losing popularity with consumers over the past several years. This has resulted in serious economic stress in the fruit industry in Washington State, USA. Consumer tests were conducted to determine the standards of firmness and soluble solids to which Red Delicious apples should be held so fruit would be acceptable to consumers. Consumer testing was done both in a sensory laboratory and as market intercepts. Specific questions were asked as to firmness and sweetness, but the most reliable data was obtained from questions gauging "willingness to buy". Positive willingness to buy responses were low until fruit firmness reached 6.0 Kgf. New non-destructive instruments have been made available to the fruit industry to sort apples for soluble solids and firmness. In these trials the non-destructive instruments did not prove to be well correlated with either the destructive measure of firmness or with consumer response.