

Modern apples are bigger, less acidic, less bitter and more storable than their wild ancestors

Detail Introduction :

New research suggests that modern apples are bigger, less acidic, less bitter and store better than their wild ancestors. Of course, the fruit is one of the most heavily produced crops in the world and its cultivation dates back at least 7,000 years. Researchers set out to look at how apples have evolved and how apples from the past compare to modern-day varieties. Using historical records, we found that apple breeding over the last 200 years has resulted in a trend towards apples that have higher soluble solids, are less bitter, and store better for longer periods of time.



The study found that cultivated apples were 3.6 times heavier, about half as acidic and far less bitter than their wild ancestral species from which modern apples are derived.

Using historical records, Sean Myles, an associate professor at Dalhousie University's Faculty of Agriculture, Canada, and his team also determined that apple breeding over the past 200 years has resulted in a trend towards apples that soften less during storage.

Writing in the PLoS ONE journal, the authors said: "Using historical records, we found that apple breeding over the past 200 years has resulted in a trend towards apples that have higher soluble solids, are less bitter, and soften less during storage. Our results quantify the significant changes in phenotype that have taken place since apple domestication, and provide evidence that apple breeding has led to continued phenotypic divergence of the cultivated apple from its wild progenitor species."