

Agrodiversity of anti-cancerous vegetable crops in India

Rahul Kumar¹, Shriti Kumari² and Arvind Nagar¹

¹Division of Vegetable Science, Indian Agricultural Research Institute, PUSA (NEW DELHI) INDIA

²Department of Agriculture Biotechnology, Junagadh Agriculture University, JUNAGADH (GUJARAT) INDIA

(Email : rahulvegiari@gmail.com)



Cancer is a disease that begins in the cells of the body. In normal situations, the cells grow and divide as the body needs them. No more, no less. This orderly process is disturbed when new cells form that the body were not needed and old cells don't die when they should. These extra cells lump together to form a growth or tumor. Approximately 200 studies that examined the relationship between fruit and vegetable intake and cancers of the lung, colon, breast, cervix, esophagus, oral cavity, stomach, bladder, pancreas, and ovary are reviewed. Plants have been used as a source of medicine throughout history and continue to serve as the basis for many pharmaceuticals used today. Although the modern pharmaceutical industry was born from botanical medicine, synthetic approaches to drug

discovery have become standard. However, this modern approach has led to a decline in new drug development in

recent years and a growing market for botanical therapeutics that are currently available as dietary supplements, drugs, or botanical drugs. Most botanical therapeutics are derived from medicinal plants that have been cultivated for increased yields of bioactive components.

The phytochemical composition of many plants has changed over time, with domestication of agricultural crops resulting in the enhanced content of some bioactive compounds and diminished content of others. Plants continue to serve as a valuable source of therapeutic compounds because of their vast biosynthetic capacity. A primary advantage of botanicals is their complex composition consisting of collections of related compounds having multiple activities that interact for a greater total activity.



