

# *Capsicum annuum*

## TAXONOMIC CLASSIFICATION:<sup>[1]</sup>



*Kingdom: Plantae*

*Division: Tracheophyta*

*Class: Magnoliopsida*

*Order: Solanales*

*Family: Solanaceae*

*Genus: Capsicum*

*Species: Capsicum annuum*

## INTRODUCTION:<sup>[2]</sup>

*Capsicum annuum* is a species of the plant genus *Capsicum* native to southern North America and northern South America. This species is the most common and extensively cultivated of the five domesticated capsicums. The species encompasses a wide variety of shapes and sizes of peppers, both mild and hot, ranging from bell peppers to chili peppers.

Cultivars are descended from the wild American bird pepper still found in warmer regions of the Americas. In the past some woody forms of this species have been called *Capsicum frutescens*, but the features that were used to distinguish those forms appear in many populations of *Capsicum annuum* and there is no consistently recognizable *Capsicum frutescens* species. Although the species name *annuum* means “annual” (from the Latin *annus* “year”), the plant is not an annual and in the absence of winter frosts can survive several seasons and grow into a large perennial shrub. The single flowers are an off-white (sometimes purplish) color while the stem is densely branched and up to 60 centimetres (24 in) tall. The fruit are berries that may be green, yellow or red when ripe. While the species can tolerate most climates, *Capsicum annuum* is especially productive in warm and dry climates.

### **PROPERTIES AND USES:<sup>[3]</sup> <sup>[4]</sup>**

- In Chronic pain.
- In Back pain
- In Osteoarthritis
- In Nausea and vomiting after surgery
- Antioxidant Properties
- Antitumoral Properties
- Analgesic Properties
- Antiulcer Properties

### **DOSAGE: <sup>[5]</sup>**

- Apply 0.025%-0.075% three to four times daily; minimum 4 weeks
- Fruit: 30-120 orally three times daily

### **SIDE EFFECTS OF EXCESS CONSUMPTION:<sup>[6]</sup>**

- Bleeding
- Local burning sensation
- Skin irritation
- Cough
- Flushing
- Stomach flu
- Abdominal irritation
- Liver damage
- Tearing
- Mucous membrane irritation
- Eye irritation
- Kidney damage
- Runny nose
- Sweating

## **RESEARCH:**

1. *Capsicum* species commonly known as Chili peppers are economically important group of plants belonging to the Solanaceae family. Of the 38 species reported, only six species namely, *Capsicum annuum*, *C. assamicum*, *C. baccatum*, *C. frutescence*, *C. chinense* and *C. pubescens* are cultivated. They are very important component of the human being as peppers are used as vegetables, spices, and a coloring agent and for medicinal purposes. Based on pungency trait which is due to the presence of a group of compounds known as capsaicinoids, cultivated capsicums are classified into sweet peppers and hot peppers. Although conventional breeding and classical genetic analysis were successful in estimating the number of genes for economically important traits governed by few major genes and their incorporation in the breeding programme, the advent of molecular markers and recently developed next generation sequencing technologies supplemented greatly in dissecting the genetic and molecular basis of economically important traits in the capsicum genome for applied research. Here in this review, we tried to highlight the use of molecular markers, comparative mapping and advanced genomics technologies and their integrated use in the translational research of cultivated *Capsicums*.

## **Special Precautions & Warnings:**<sup>[7]</sup>

- In Pregnancy
- Breastfeeding
- Bleeding disorders

---

## **INTERACTION WITH MEDICATIONS:**<sup>[7]</sup>

- Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs) interacts with CAPSICUM
- Theophylline interacts with CAPSICUM

- Medications for high blood pressure (ACE inhibitors) interacts with CAPSICUM

### **REFERENCES:**

1. [https://www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=30492#null](https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=30492#null)
2. <http://theworldwidevegetables.weebly.com/capsicum-annuum.html>
3. <https://www.webmd.com/vitamins/ai/ingredientmono-945/capsicum#>
4. [https://www.researchgate.net/publication/325883876\\_Capsicum\\_annuum\\_L\\_An\\_Overview\\_of\\_Biological\\_Activities\\_and\\_Potential\\_Nutraceutical\\_Properties\\_in\\_Humans\\_and\\_Animals](https://www.researchgate.net/publication/325883876_Capsicum_annuum_L_An_Overview_of_Biological_Activities_and_Potential_Nutraceutical_Properties_in_Humans_and_Animals)
5. [https://www.rxlist.com/consumer\\_capsicum/drugs-condition.htm](https://www.rxlist.com/consumer_capsicum/drugs-condition.htm)
6. [https://www.rxlist.com/consumer\\_capsicum/drugs-condition.htm#what\\_are\\_side\\_effects\\_associated\\_with\\_using\\_capsicum](https://www.rxlist.com/consumer_capsicum/drugs-condition.htm#what_are_side_effects_associated_with_using_capsicum)
7. <https://www.webmd.com/vitamins/ai/ingredientmono-945/capsicum>



**NISARGA BIOTECH**  
SINCE 1998