

- 1 Title** : **Performance of strawberry cultivars under Navsari conditions**
- 2 Location & Agro-climatic sub region** : Regional Horticultural Research Station
Navsari Agricultural University, Navsari
South Gujarat Heavy Rainfall Zone-I, AES-III
- 3 Principal Investigators** : Dr. P. D. Solanki
Co-PI : Dr. B. M. Tandel and Dr. V. K. Parmar
- 4 Background information** : The cultivated strawberry (*Fragaria x ananassa*Duch.) is one of the soft fruits of the world. It is a hybrid of two Native American species; *Fragariachiloensis* and *Fragariavirginiana*, belongs to the Rosaceae family. Botanically it is an aggregate fruit which is highly perishable in nature. It is native of temperate regions, however, some varieties are available which can be cultivated in subtropical climate. The strawberry is among the most widely adopted small fruit crops of the country. Strawberry is grown throughout Europe, in every United States as well as Canada and South America. In India it is cultivated in the hilly areas. Its main cultivated areas are Nainital and Dehradun districts in Uttaranchal, Mahabaleshwar in Maharashtra, Kashmir Valley, Bengaluru and Kalimpong in West Bengal. In recent years, strawberry is being cultivated successfully in hills regions of *The Dangs* in Gujarat.
- The wide variation in climate within these regions and the wide adaption of the strawberry plants permit harvesting and marketing the fruits during greater part of the year. This soft fruit is having a distinct tantalizing aroma. It is highly nutritious with abundant source of vitamins A, B, C and niacin, minerals like phosphorus, potassium, calcium and iron. It is utilized for the production of purees, juice concentrate, jams, preserves and rose red wine. Medicinally, strawberries have been known for its anti-viral properties against polio, these may block the formation of nitosamines which can cause cancer. Furthermore these contain relatively high quantities of ellagic acid which has a wide range of biological activities (Rieger, 2006). The wide diversity of strawberry plant gives an idea of its potential for selection work. Choice of cultivars is of paramount importance for successful strawberry cultivation. Selection of new stable strawberry cultivars for field condition can ensure better yield and quality. Considering above facts the present study work will be undertaken with a view to evaluate the performance of different strawberry cultivars at Navsari condition.
- 5 Objectives** : • To evaluate strawberry cultivars under Navsari condition
- 6 Year of Commencement** : 2022-23

- 7 **Year of Completion** : 2025-26
- 8 **Crop** : Strawberry
- 9 **Experimental Details** :
- Design** : RBD
- Replication** : 3
- No. of plants per treatment** : 60
- Spacing** : 60 cm x 60 cm
- Gross plot** : 3.6 m x 3.3 m
- Net plot** : 2.7 m x 2.4 m
- Treatments** : 8
- Strawberry Varieties T₁: Camerosa
 T₂: Winter Dawn
 T₃: Nabila
 T₄: Vivara
 T₅: San Andreas
 T₆: Sweet Sensation
 T₇: Flaviea
 T₈: Flaminia

10 Observation to be recorded:

1. Plant spread N-S & E-W (cm) (at 30, 60, 90, 120 and 150 DAP)
2. Number of leaves / plants (at 30, 60, 90, 120 and 150 DAP)
3. Numbers of flowers per plant
4. Duration of flowering(days) (From 30 DAP to end of crop)
5. Number of fruits per plants
6. Fruit shape (Early, Middle and Late bearing season)
7. Fruit weight (g) (at full bearing stage)
8. Fruit Length (cm)(at full bearing stage)
9. Fruit diameter (cm)(at full bearing stage)
10. Fruit yield (kg/plot and kg/ha)
11. Duration of harvesting (From first harvest to last harvesting date)
12. Diseased or misshapen fruit per net plot (%)
13. Marketable fruits per net plot
14. Marketable yield (kg/plant), Marketable yield (kg/plot) and Marketable yield (kg/ha)
15. TSS (°B)
16. Shelf life
17. Acidity (%)
18. Total sugar (%)
19. Ascorbic acid (mg/100g)
20. Pest and diseases, if any