



# MACS 1407: Variety of Soybean

## Why in News

Recently, **Indian Scientists** have developed a **high-yielding and pest-resistant variety of soybean**, called **MACS 1407**.

- Scientists from **MACS- Agharkar Research Institute, Pune**, in collaboration with **Indian Council of Agricultural Research, New Delhi** have developed it.

## Key Points

### ▪ MACS 1407:

- Using the conventional cross breeding technique, scientists developed **MACS 1407** which gives **39 quintals per hectare** making it a **high yielding variety**.
- It **requires an average 43 days for 50% flowering** and takes 104 days to mature from the date of sowing.
- It has white coloured flowers, yellow seeds and black hilum. Its seeds have **19.81% oil content, 41% protein content and show good germinability**.
- Its thick stem, higher pod insertion (7 cm) from ground, and resistance to pod shattering make it suitable even for **mechanical harvesting**.
- It is **suitable for rain-fed conditions of north- east India**.
  - It is suitable for cultivation in the states of Assam, West Bengal, Jharkhand, Chhattisgarh and North-Eastern states.
- Variety is also **resistant to major insect-pests** like girdle beetle, leaf miner, leaf roller, stem fly, aphids, white fly and defoliators.
- Its seeds will be made available to farmers for sowing during the **2022 Kharif season**.
  - It is highly adaptive to sowing from **20 June to 5 July** without any yield loss. This makes it **resistant to the vagaries of Monsoon** as compared to other varieties.

### ▪ Significance:

- In **2019, India produced around 90 million tons of soybean**, widely cultivated as oil seeds as well as a cheap source of protein for animal feed and many packaged meals and is striving to be among the world's major producers of soybean.
- High-yielding, disease resistant varieties of the legume can help achieve this target.

## Kharif Season

- Crops are **sown from June to July** and **Harvesting** is done in between **September-October**.
- Crops are: Rice, maize, jowar, bajra, tur, moong, urad, cotton, jute, groundnut, soyabean etc.
- States are: Assam, West Bengal, coastal regions of Odisha, Andhra Pradesh, Telangana, Tamil Nadu, Kerala and Maharashtra.

## Rabi Season

- Crops are **sown** from **October to December** and **Harvesting** is done in between **April-June**.
- **Crops are:** Wheat, barley, peas, gram, mustard etc.
- **States are:** Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Uttar Pradesh.

### **Zaid Season**

- In between the rabi and the kharif seasons, there is **a short season during the summer months** known as the Zaid season.
- Crops are: watermelon, muskmelon, cucumber, vegetables and fodder crops.

**Source: PIB**

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