Arka Shubha: New Marigold Variety

Why in News

The **Indian Institute of Horticultural Research (IIHR)** has developed a new marigold variety named **Arka Shubha.**

Key Points

- **About:**
  - **High Carotene Content:** Arka Shubha has carotene content of around 2.8% (for all marigolds, it's maximum upto 1.4%) which is the highest among all plant sources.
  - **Used after Spoiled:** This new variety of marigold can be used for extraction of crude carotene even if spoiled after full bloom, unlike that of other varieties.
- **Significance:**
  - **Ornamental & Carotene Extraction:** This new variety not only has ornamental purpose but is also a good source of crude carotene.
  - **Poultry Feed:** Its petals could be used as poultry feed to get quality yolk.
  - **Reduce Import Dependency:** India imports most of its carotene from other countries, including China. This development can significantly reduce import dependency. Therefore, both cultivation area and investment on carotene extraction should be increased.

Carotene

- Carotenes are carotenoid pigments that are oxygen-free. Mostly they are unsaturated hydrocarbons that contain only carbon and hydrogen.
- Their color varies from yellow to orange to red. The color is attributed to the chain of alternating single and double bonds.

  Carotene is responsible for the orange colour of carrots.
- α-carotene, β-carotene, and lycopene are examples of carotenes.
- Carotene is used in the pharmaceutical sector, there is always a high demand for it.

Indian Institute of Horticultural Research

- Indian Institute of Horticultural Research **(Indian Council of Agricultural Research)** is an autonomous organization under the Department of Agricultural Research and Education, Ministry of Agriculture & Farmers Welfare.
- IIHR has a **main research station at Bengaluru** and regional experiment stations at Bhubaneswar in Orissa and Chettalli in Karnataka with two Krishi Vigyan Kendras.
- The institute's main research agenda was to increase the yields of horticultural crop varieties by developing high yielding varieties in fruits, vegetables, ornamentals and medicinal products.

Source :TH