Contarinia icardiflores

Prelims: *Current events of national and international importance*

Why in News?

Scientists at ICAR-DFR Pune have recently discovered that Contarinia icardiflores, a new blossom midge pest damaging jasmine crops in India, affecting yields and farmer incomes.

- It is a ***newly discovered species of blossom midge (tiny fly)*** that has been identified as a serious pest affecting jasmine crops in India.
- **Discovered by -** Scientists at the **ICAR-Directorate of Floricultural Research (ICAR-DFR), Pune**.
- Its specific epithet *icardiflores* honors the institute's contribution to floriculture research.
- **Genus** - Blossom midges of the *Contarinia* genus are known pests in many parts of the world that attack floral buds, blossoms or inflorescences of horticultural and agricultural crops.
- **Size -** The insect is very small (~1.5–2 mm), making early detection difficult.
- **Impact -** It infests flower buds of *Jasminum sambac* (Arabian jasmine), a crop of significant commercial value for perfume, garland and ornamental industries in India.
- The larvae feed inside the buds, causing them to swell, discolour, and rot before blossoming, leading to substantial yield and economic losses for jasmine growers.
- It completes its life cycle rapidly in about 16–21 days, contributing to its potential as a recurring pest outbreak.
- **Morphology -** Although morphologically similar to *Contarinia maculipennis* (another jasmine pest), *C. icardiflores* is genetically distinct, confirmed by scientists.
- The use of molecular tools (such as sequencing of mitochondrial COI gene regions) has made rapid and accurate identification possible crucial for monitoring and management strategies.

- **Management strategies -** It highlights an emerging pest threat to jasmine cultivation in states like Maharashtra, Tamil Nadu, Andhra Pradesh and Karnataka, where jasmine contributes to both rural livelihoods and traditional industries.
- Understanding the biology and rapid life cycle of *C. icardiflores* is important for developing eco-friendly pest management strategies tailored to protect jasmine growers.

Reference

Nature | Contarinia icardiflores