

# IARI scientists developed three varieties of wheat

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**In news**– ICAR-Indian Agricultural Research Institute scientists developed new climate-smart varieties of wheat, amenable to early sowing and escaping the impact of March mercury spikes.

## About wheat varieties-

- The IARI scientists **have developed three varieties, all of them incorporating genes that are responsible for the mild vernalisation requirement preventing premature flowering and early heading.**
- **The first, HDCSW-18,** was released and officially notified in 2016.
- Although having a **potential wheat yield of over 7 tonnes per hectare** – as against 6-6.5 tonnes for existing popular varieties such HD-2967 and HD-3086 – its plants grew to 105-110 cm.
- Being tall, compared to 90-95 cm for normal high-yielding varieties, made them prone to lodging or bending over when their earheads were heavy with well-filled grains.
- **The second variety HD-3410, released in 2022, has higher yield potential (7.5 tonnes/hectare) with lower plant height (100-105 cm).**
- But it's the **third one, HD-3385,** which looks **most promising.** With the same yields as HD-3410, plant height of just 95 cm and strong stems, it is least lodging-prone and most amenable for early sowing.
- This variety, sown this time at IARI's trial fields on October 22, has reached pollination stage while the emergence of the earheads is yet to start for the wheat

that was planted in the normal time.

- **IARI has registered HD-3385 with the Protection of Plant Varieties and Farmers' Rights Authority (PPVFRA).**
- It has also licensed the variety to the DCM Shriram Ltd-owned Bioseed for undertaking multi-location trials and seed multiplication.
- **This is IARI's first ever such public-private partnership experiment.**

**Further**

**reading:**

**<https://journalsofindia.com/rht13-drought-resilient-wheat-gene>**

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