India’s first cryptogamic garden

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In news- India’s first cryptogamic garden has been inaugurated in Uttarakhand’s Dehradun district.

Key updates-

- It is located in the Chakrata town of Dehradun.
- A garden at Deoban in Chakratahouses almost 76 different species of cryptogams, a primitive plant species found since the Jurassic era.
- Because of its low pollution levels and moist conditions which are conducive for the growth of these species, Deoban is chosen.
- Deoban also has pristine majestic forests of Deodar and Oak which create a natural habitat for cryptogamic species.

About Cryptogams-

- A cryptogam (scientific name Cryptogamae) is a plant or a plant-like organism that **reproduces by spores, without flowers or seeds**.
- “Cryptogamae” means “hidden reproduction”, referring to the fact that no seed is produced.
- Other names, such as “thallophytes”, “lower plants”, and “spore plants” are also occasionally used.
- The best-known groups of cryptogams are **algae, lichens, mosses and ferns**, and also includes non-photosynthetic organisms traditionally classified as plants, such as **fungi, slime molds, and bacteria.**
- Algae comprises the most primitive organisms which are predominantly aquatic, both in marine as well as freshwater habitats.
- Ferns are the largest living group of primitive vascular

plants while fungi is a kingdom of usually multicellular eukaryotic organisms that are heterotrophs.

- Bryophytes are the simplest and primitive land plants that occupy an intermediate position between algae and pteridophytes.
- Lichens are a complex life form that is a symbiotic partnership of two separate organisms, a fungus and an algae.
- Cryptogams are considered among the **best bioindicators,** as they grow only at places without pollution and with ample soil moisture.
- These species will just vanish even if there is the slightest deviation in the environmental indicators.
- Not all cryptogams are treated as part of the plant kingdom; the fungi, in particular, are regarded as a separate kingdom, more closely related to animals than plants, while blue-green algae are now regarded as a phylum of bacteria.

The names of all cryptogams are regulated by the I**nternational Code of Nomenclature for algae, fungi, and plants.**