

Di-ammonium phosphate

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In news- Due to a hike in fertiliser prices by the companies, the government announced an increase in subsidy for di-ammonium phosphate (DAP) fertilisers from Rs 500 per bag (50-kg) to Rs 1,200 per bag.

About DAP-

- Diammonium phosphate is one of a series of **water-soluble** ammonium phosphate salts that can be **produced when ammonia reacts with phosphoric acid**.
- When applied as fertilizer, it **temporarily increases the soil pH**, but over a long term the treated ground becomes more acidic than before upon nitrification of the ammonium.
- It is **incompatible with alkaline chemicals** because its ammonium ion is more likely to convert to ammonia in a high-pH environment.
- The average pH in solution is 7.5–8.
- DAP can be **used as a fire retardant** as it lowers the combustion temperature of the material, thus has important effects in **fighting wildfires**.
- It is also used as a **yeast nutrient in winemaking and bread-making**.
- It is an additive in some brands of cigarettes purportedly as a **nicotine enhancer**.
- It is used in **purifying sugar**, as a flux for soldering tin, copper, zinc and brass.
- The compound occurs in nature as the exceedingly **rare mineral phosphamite**, related to **guano deposits**.