

1. Black soldier fly

Why in News?

- Recently, India is among the top five chicken and egg producers in the world, but there are challenges to the business for small poultry farmers because of the quality, quantity and cost of feed

Highlights

- Feeds account for up to 70% of the entire cost of poultry production. Besides, the conventional feed supplied to the poultry, majorly cereals and soya, competes with the food demands of a growing human population.
- In addition to rising cost, the feed resource availability is a major determinant of the sustainability of the poultry sector.
- One such alternative is brewers dried grains, a byproduct of the brewing industry.
- Though rich in protein and amino acid, its limitations include high moisture and fibre content.
- Rice bran is another economically viable alternative to wheat in certain parts of the country. It has a comparable apparent metabolisable energy as wheat.
- However, studies show that the laying performance of the chicks declined on incorporation of rice bran to the feed.
- The larvae of black soldier fly (*Hermetia illucens*), for instance, have a high nutritional value and are easy to raise.
- The black soldier fly is a fly (Diptera) of the Stratiomyidae family that is commonly found in many parts of the world.
- They are a dull, whitish color. They feed on a variety of organic matter, from rejected food waste to manure.
- They also have high waste-to-biomass conversion efficiency.
- This means, unlike hot-blooded mammals and birds, which use a lot of energy to keep themselves warm, insects are efficient converters of food into body mass.