



Habrocestum Longispinum

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Recently **arachnologists (those who study spiders and other arachnids)** have spotted a group of spiders in Illithodu forests of **Ernakulam district of Kerala**.

This is relevant because these spiders have **been spotted in India for the first time** and they mostly occur in Eurasia and Africa.

Arachnids

- Arachnids include a **diverse group of invertebrates: spiders, scorpions, ticks, mites**, etc. There are over 100,000 species of arachnids.
- The name Arachnida derives from the **Greek aráchnē, which means spider**. The vast majority of arachnids are spiders.
- Most arachnids are **carnivorous, typically preying on insects, and terrestrial, living on land**. They lack both wings and antennae.
- Their mouthparts often have narrow openings, which restricts them to **eating liquefied prey**.
- They help in **keeping insect populations under control**.
- Habrocestum Longispinum (after Latin 'longe' meaning long and 'spinae' for spine) belong to the genus Habrocestum that has been recorded mostly in Eurasia and Africa.
- It can be said that the species is not only new to India, but also science.
- The discovery lends support to the continental drift theory that suggests that the world's continents were one large, contiguous landmass where these creatures thrived many millions of years ago.

Continental Drift Theory

- Set forth in **1912 by Alfred Wegener**, a geophysicist and meteorologist, continental drift theory **explains the present position of continents on the earth's surface**.

- Wegner assumed existence of the earth's three layers- outer layers of 'Sial', intermediate layer of 'Sima' and lower layer of 'Nife'.
 - **Sial: Silicon + Aluminium,**
 - **Sima: Silicon + Magnesium**
 - **Nife: Nickel + Iron**
- Continents or the sialic masses were assumed to be floating on sima without any resistance.
- The united continent landmass was named as **Pangaea** and the water body surrounding it was **named Panthalassa.**
- Owing to the gravitational force and tidal force of both sun and moon, the Pangaea began to drift apart in westward and equatorward directions and finally broke into **Angaraland (northern part) and Gondwanaland (southern part).**
- **Water body named Tethys Sea** filled up the intervening space between the two landmasses, while drifting .
- The jigsaw fit of the African and South American coasts, similarity in the fossils, species (**Astrotrachus Kurichiyana Frog**) and vegetation remains on South Africa, Australia, India and Africa and evidences of carboniferous glaciation of Brazil, Falkland, Peninsular India and Antarctica were arguments given in favor of the theory.
- Although Wegener's "**continental drift**" theory was **discarded**, it did introduce the **idea of moving continents to geoscience.**