FMBusinessDaily

DS Smith Engage Bees to Monitor Natural Habitats at Thirteen Packaging Facilities in France

2 months ago

DS Smith, an International Paper company, and a leading global supplier of fibre-based and sustainable packaging solutions, announces the first results of its partnership with Apilab, a world leader in bee biomonitoring.

Launched in 2025, the scientific partnership is transforming bees into environmental sentinels at thirteen packaging facilities across France. The bees provide early warning signs of changes in their ecosystem.

Apilab: innovation is key to biodiversity.

Apilab has developed a unique methodology that is AFNOR-certified and validated by the European INSIGNIA protocol. The bees forage within a 3-kilometre radius to collect millions of micro-samples each day. They deposit the non-invasive sampling materials, including nectar and pollen captured on silicone bracelets, propolis grids and Apistrips in their hives. These samples are analysed by Apilab experts in the laboratory and assessed for floral biodiversity, air quality, and pollutants.

This innovative biodiversity mapping approach enables the measurement of industrial impact on local ecosystems, supporting the objectives of the Corporate Sustainability Reporting Directive (CSRD). The CSRD requires companies to disclose detailed environmental, social, and governance (ESG) information to enhance the transparency and accountability of their business practices. It also supports the monitoring of ecosystems around industrial and manufacturing sites and track changes in biodiversity over time.

Positive results at a national level

Analysis across the thirteen DS Smith facilities, ranging from urban environments, green spaces, and rural areas, reveals:

- An average biodiversity score of 0.54, demonstrating a moderate to good level of floral diversity across sites.
- An average of twenty-five plant families detected per site via environmental DNA, with a variation of twelve to thirty-five families depending on the region.
- A high presence of dominant taxa such as Salicaceae (23%) and Fagaceae (22%), including willows, poplars, and chestnut trees, important nectar sources for pollinators.

“This biodiversity mapping allows us to identify the strengths and areas for improvement of each packaging site. It is extremely valuable to us in terms of helping to guide our actions and inform our planning decisions when we create ecological corridors, plant native species, and approach our management of a variety of differentiated green spaces,” said Julien Clery, CSR Manager, DS Smith Packaging, France.

The DS Smith project is a key contributor to the wider international Apilab biomonitoring network that consists of over five hundred natural areas.

DS Smith has a target-led sustainability strategy, *Redefining Packaging for a Changing World*, and is committed to leading an industry-wide transition to a circular economy while delivering sustainable circular solutions for its customers worldwide.