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MARMADE to harness marine biomass for innovation in food and feed ingredients

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With the global population projected to reach 9.8 billion by 2050 and mounting pressure on food systems, a new European research initiative, MARMADE, has officially launched to develop sustainable, high-value ingredients for food and feed from marine biomass.

The three-year project, funded by the Circular Bio-based Europe Joint Undertaking (CBE JU) â?? a partnership between the European Union and the Bio-based Industries Consortium (BIC) â?? brings together 11 partners from seven European countries, combining scientific research with industrial expertise.

Focusing on the valorisation of crustacean residues (such as shrimp shells and blue crabs) and seaweed (green, red, and brown species), MARMADE aims to advance biorefinery processes that extract bioactive compounds for innovative food and feed prototypes with improved nutritional properties.

The kick-off meeting, held on September 12 at the University of Camerino, marked the first major milestone. Representatives from all project partners and the CBE JU gathered to align on the roadmap and initial activities.

â??MARMADE represents an important step towards more resilient, sustainable food systems by turning underused marine resources into nutritious, safe, and affordable ingredients,â? said project representatives during the launch.

Aligned with the European Green Deal, the Farm to Fork Strategy, and the EU Bioeconomy Strategy, MARMADEâ??s objectives include:

Reducing reliance on petrochemical-based ingredients.

Enhancing the nutritional profile of food and feed.

Strengthening the circular economy through cascading extraction processes.

Ensuring compliance with Safe and Sustainable by Design (SSbD) principles.

By combining sustainability, safety, and innovation, MARMADE aims to pave the way for market-ready food and feed solutions that address the twin challenges of population growth and environmental protection.