

ICARDA,

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The Mediterranean region is a major global hub for grain legumes. As both a center of origin and a region where legumes remain vital to food systems, soil health, and ecosystem services, it faces growing challenges from climate change, soil degradation, water scarcity, and dependence on imported protein. Strengthening legume-based systems is therefore essential for climate resilience, sustainable intensification, and nutrition security.

Within this context, the **International Center for Agricultural Research in the Dry Areas (ICARDA)**, a **CGIAR center**, plays a central role in advancing legume research and innovation across the Mediterranean. Its program focuses on chickpea, lentil, faba bean, pea, and grasspea—crops well suited to Mediterranean drylands. ICARDA's work covers the full research-to-impact pipeline, from conserving genetic resources to breeding, seed systems, and policy support.

ICARDA maintains one of the world's largest legume germplasm collections, including over 15,000 chickpea, 14,000 lentil, 10,000 faba bean, 4,400 lathyrus, and 6,000 pea accessions. These collections underpin breeding programs across Europe and North Africa, enabling the development of drought-, heat-, and cold-tolerant varieties, as well as short-duration types that escape terminal drought. Significant progress has also been made in resistance to major diseases and parasitic weeds such as *Ascochyta* blight, rust, *Fusarium* wilt, and *Orobanche*. More than 200 climate-smart legume varieties have been released with ICARDA's support.

In Mediterranean Europe, ICARDA contributes to the region's protein transition through EU and PRIMA-funded initiatives that enhance machine-harvestability, lodging resistance, stress tolerance, and climate resilience—helping reintegrate legumes into cereal-based systems. These efforts align with the EU Green Deal and Farm to Fork strategies by reducing reliance on imported protein and lowering fertilizer use.

In North Africa, where legumes are central to food security and smallholder resilience, ICARDA has supported the release of 72 chickpea, 56 lentil, and 31 faba bean varieties. The center also promotes biofortified, nutrient-dense legumes, improved rotations, stronger seed systems, and capacity development for researchers and farmers. Shared germplasm and knowledge create spillover benefits across similar agro-climatic zones.

ICARDA's work demonstrates how science and partnerships can drive climate resilience, sustainability, and nutrition across the Mediterranean. As we mark World

Pulse Day on 10 February, the message remains clear: Pulses for People and the Planet.