





# **Examples of national** initiatives for the conservation of PGRs

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## Plant Genetic Resources Centre (CRF)

Plant genetic resources are essential for future global food security. The CRF is the center of INIA that has a legal mandate to conserve, coordinate activities and facilitate the use of all resources held in the banks of the Plant Genetic Resources National Program Network.



#### Services y Resources

- Provision of genetic material in accordance with Nagoya Protocol regulations
- Advising the MAPA and the PNRF Network on International Aspects of Plant Genetic Resources (TIRFAA,
  FAO Commission on Genetic Resources and ECPGR)
- Coordination of conservation activities and documentation of the PNRF Network
- Management and Publication of the National Inventory of Plant Genetic Resources with Passport Data
  Information and Characterization of PNRF Network Collections
- Maintenance of the Seed Base Collection of the PNRF Collection Network
- Facilitate access of genetic material in accordance with the regulations of the FAO International Treaty on
  Plant Genetic Resources for Food and Agriculture



### THE KSA NATIVE GENOME PROJECT

APPLY

#### **Project Description**

Environmental protection via the conservation of biological diversity is a central theme of the Kingdom of Saudi Arabia's (KSA) Vision 2030. Biologically characterizing ecosystems that are relevant to the mission of MEWA's National Center for the Development of Vegetation Cover & Combating Desertification (NCDVC&CD) would provide essential data as to how and why a particular ecosystem operates in a particular environment. This information can then, in turn, be used to engineer large-scale ecosystems that are sustainable, will positively influence vegetation cover, and will fight against desertification across the KSA. In partnership with the NCDVC&CD, the CDA are studying many common and endangered plant species of cultural, religious, medicinal and pastoral significance. This will establish project robust pipeline/infrastructure to characterize 100s-1000s of different

### About the Researcher Rod Wing



#### **Desired Project Deliverables**

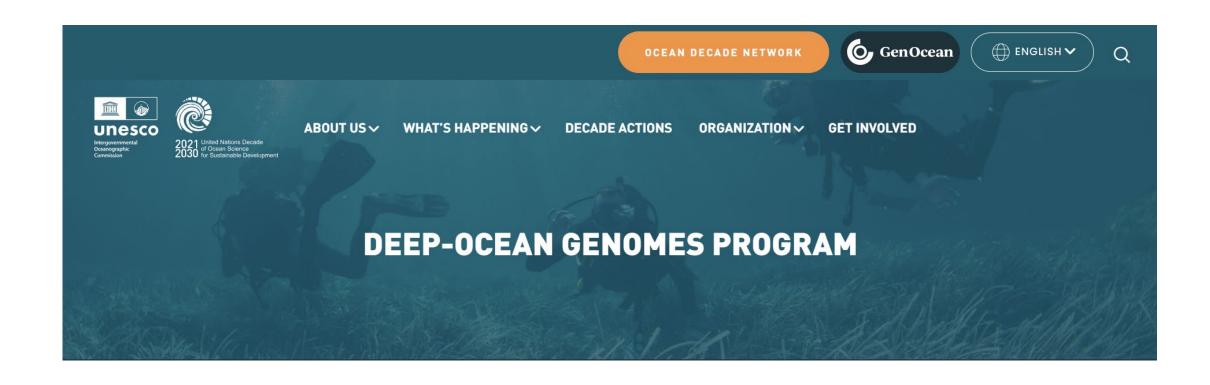
- Generate high-quality genomic resources for all native plants under study, and associated microbial species in the

KSA - Investigate metabolomes, root dev microbiomes

Hi, I'm Hakeem - the KAUST Bot. I'm here to help you learn more about Admissions and Internships. Say "Hi" to get started or let me know what questions you have!























#### Cas protein search

Available search formats:

- 1- FASTA-formatted sequence
- 2- Word search (e.g. Cas name or accession)
- 3- Or simply hit 'Search' for the current full list of entries

#### WHAT IS CasPEDIA?

CasPEDIA, or the Cas Protein Effector Database of Information and Assessment, is an encyclopedia of Class 2 CRISPR systems, presented in wiki format. Wiki entries provide comprehensive descriptions of enzyme activities, structures and sequences, complete with a literature review covering each nuclease's discovery, experimental considerations and applications.

// Search







**PTI AGROFOR** 



## La Plataforma Temática Interdisciplinar AGROFOR



#### What is Harnesstom DB?



There is a significant volume of data on tomato genetic resources relevant to the economy and agriculture stored in different local/project databases

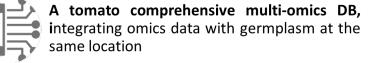












Openly accessible to the global research community, encouraging collaboration and knowledge sharing

FAIR-compliant system mapping to MCPD, MIAPE, MIXS and BRAPI standards and implementing ontologies to enhance metadata annotation and facilitate data exchange and interoperability with other databases and tools

Provided with tools for harnessing the potential of tomato germplasm collections for breeding







### THANK YOU