



Overview of Bean Test Datasets and Test Applications

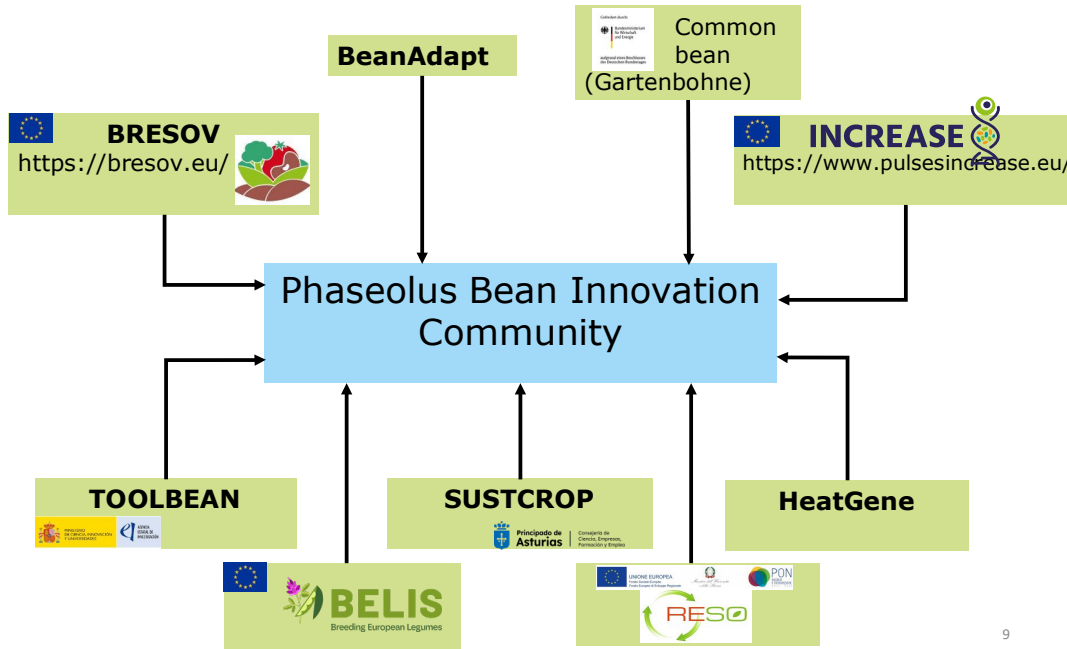
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Legume Generation Project



The Legume Generation Phaseolus Bean Innovation Community provides a route to plant breeding for a range of projects



HeatGenes (amongst others): Research at Radboud University and KWS produced protocols that are used in Legume Generation heat trials.

Gartenbohne (Breeding innovative varieties in common bean by identifying new marker-trait associations for bacteriosis resistance pod quality parameters and rooting depth - van Waveren GmbH and IPK Gatersleben) provides experience in root phenotyping and characterization of 200 breeders' lines/varieties and 200 PGRs for selection for use in Legume Generation.

INCREASE (Intelligent Collections of Food Legumes Genetic Resources for European Agrofood Systems) Partners: SERIDA, UNIVPM, UNIBAS, IPK (amongst others) provides phenotyping data, genetic information and plant material

BRESOV (Breeding for Resilient, Efficient and Sustainable Organic Vegetable production Partners: SERIDA, UNIVPM (amongst others) provides phenotyping data, genetic information and plant material

TOOLBEAN-I/TOOLBEAN-II (SERIDA funded Spanish Government) provides phenotyping data, genetic information and plant material

SUSTCROP_I/SUSTCROP_II (SERIDA funded by the Asturias Regional Government provides phenotyping data, genetic information and plant material

BEAN ADAPT (UNIVPM, UNIBAS, SERIDA, IPK funded by the ERA-CAPS Programme provides phenotyping data, genetic information and plant material

Legume Generation Project



- Field phenotyping is in progress in all field location in 2025. The data will be compiled in a common database.

Once the phenotyping and genotyping data are available, association studies and mapping to identify marker-trait associations as basis for breeder friendly molecular markers will be conducted. In parallel, pods, seeds and symptoms of diseases and pests will be documented with photos, and the images will be made available in a Zenodo repository

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