



Current users of Crop Ontology

Integrated Breeding Platform

www.integratedbreeding.net

Global Agricultural Trials Repository

www.agtrials.org

International Cassava database

www.cassavabase.org

Bayer

<https://www.bayer.com/>

Boyce Thompson Institute

<https://btscience.org/>

CO is recommended by **MIAPPE** and **BrAPI**, and listed on the following ontology repositories: **EBI-OLS** and **AgroPortal**.

Centers leading the development of the crop-specific trait dictionaries



Partners

AfricaRice, BTI, CIAT, CIRAD, DARS, EIAR, IER du Mali, IFPRI, INERA, INRA, IRD, ISRA, NaCRRI, NARONCRI, OSU, PeanutBase, Polish Academy of Sciences, Pereira Technological University, UC Riverside, USDA-ARS

Bioversity International

Bioversity International delivers scientific evidence, management practices and policy options to use and safeguard agricultural and tree biodiversity to attain sustainable global food and nutrition security.

Contact us

- ⇒ helpdesk@croponontology-curationtool.org
- ⇒ github.com/bioversity/Crop-Ontology
- ⇒ Crop Ontology community Website:
<http://tinyurl.com/COcommunity>

croponontology.org



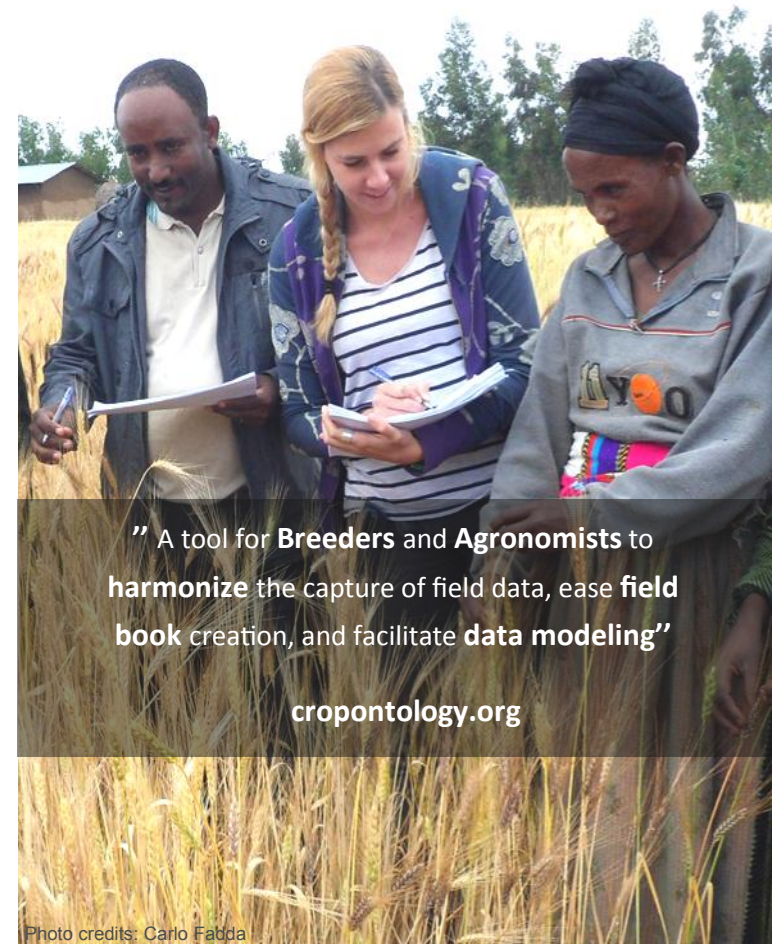
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Crop Ontology contributes to the Divseek initiative that aims to unlock the potential of crop diversity stored in genebanks.

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" A tool for **Breeders** and **Agonomists** to **harmonize** the capture of field data, ease **field book** creation, and facilitate **data modeling**"

croponontology.org

Photo credits: Carlo Fadda



Platform for
Big Data
in Agriculture





What is Crop Ontology?

Crop Ontology is a service of the Big Data Platform and targets agricultural data annotation. The project is led by Bioversity International in collaboration with the CGIAR and other partners. Crop Ontology centralizes **variables defined by breeders to annotate their data** regarding germplasm, phenotypes, trial location, environment and design, plant anatomy, and plant development.

Semantics for phenotypes

- 9175 harmonized and validated variables
- 27 crop-specific trait dictionaries/ontologies

Banana	Chickpea	Oat	Sunflower
Barley	Common bean	Pearl millet	Sweet potato
Beet	Cowpea	Pigeon pea	Vitis
Brachiaria	Groundnut	Potato	Wheat
Brassica	Lentil	Rice	Woody plants
Cassava	Maize	Sorghum	Yam
Castor bean	Mung bean	Soybean	

Pending: Andean roots and tuber, coconut, coffee, cotton, finger millet, flax, protein crop.

Crop Ontology Community

Crop Ontology is leading a community of scientists. Workshops on semantic harmonization of phenotyping and agronomic data are regularly held, last one was PhenoHarmoniS 2018 in Montpellier, France. The Crop Ontology Community website gathers information and events related to the community.

Crop Ontology,

a tool developed by and for the breeder's community

