

Plants, People, Planet Supporting Information

Article title: Bridging the Gap? Public-Private Partnerships and Genetically Modified Crop Development for Smallholder Farmers in Africa

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The following Supporting Information is available for this article:

Methods S1 Categorization of Crops

Methods S1 Crops were categorized into groups following the Indicative Crop Classification (ICC) version 1.1 (FAO 2017). ICC lists nine main groups: cereals; vegetables and melons; fruit and nuts; oilseed crops and oleaginous fruits; root/tuber crops with high starch or inulin content; stimulant, spice and aromatic crops; sugar crops; and other crops. For visualization purposes, we removed maize from cereals, soybeans from oilseed crops, and cotton from the other crops since these crops constituted a large portion of their respective groups. Further we included oilseed crops (excluding soybeans) and stimulant, spice, and aromatic crops with our ‘other’ group due to their low number of occurrences in our data. The following crops appear in each group in our data:

- Fruit and nuts – apple, banana, grapevine, strawberry
- Cereals excluding maize – barley, rice, sorghum, wheat
- Vegetables and melons – bulb flower, melon, squash, tomato
- Other – canola, gypsophila, tobacco
- Root/tuber crops – cassava, enset, potato, sweet potato
- Leguminous crops – chickpea, cowpea, fava bean, lentils, pigeon pea
- Sugar crops – sugarcane
- Cotton – cotton
- Maize – maize
- Soybean – soybean

Categorization of Traits

Trait categories were derived from functional traits using entries in the ISAAA database under the term “commercial traits”. We captured only the functional traits to make our own categorization. In some cases, we grouped some functional traits into trait categories according to the following rules:

- Disease resistance = disease + virus + fungus resistance or tolerance + weed resistance
- Modified product quality = modified product quality + petal color stabilization + improved shelf life + nicotine free + starch enhancement
- Other = pollination control system + high protein + improved root storage

Food and Agriculture Organization of the United Nations (FAO) (2017). World programme for the consensus of agriculture 2020. Volume 1: Programme, concepts and definitions.

<https://www.fao.org/3/i4913e/i4913e.pdf> (Accessed: 4 October 2023)