

Optimal Crossing Design of the Rapid cooking bean project (RCBP)

<https://research.aciar.gov.au/rapidcookingbeans/brio>



Rapid and market-focussed crop breeding for sustainable and superior genetic gain

A1	DESIGNAT	VOHA	FESEED	ZNSEED	COOKT	Site
1	ALB6	NA	58.5	32	63.8333	1
2	ALB6	1343.182	NA	NA	61.03333	1
3	AWASHM	1111.613	58.3	32.8	64.8	1
4	78F510	986.667	61.3	34.3	95.2333	1
5	88F510	1188.276	55.8	35.8	87.56667	1
6	11BOUNTY	1187.027	72.1	43.2	64.25	1
7	14CAL96	1346.071	63.5	34.7	79	1
8	16CAL96	1475.333	84	41	63.15	1
9	17CHERRY	1375.833	69.1	34.8	66.55	1
10	18CHERRY	1383.729	59.2	34.5	90.16667	1
11	19CODALBO	731.5385	55.1	31.2	83.15	1
12	21CODALBO	1350.909	52.1	31.9	77.8333	1
13	22CODALBO	2185.163	71.1	35.2	68.48333	1
14	23DAB302	1274.839	67.9	36.1	76.85	1
15	25DAB366	645.3333	76.5	38.1	92.0833	1
16	26DAB366	1831.376	47.5	27.4	91.1833	1
17	27DAB441	2355.417	54.9	33.4	92.0833	1
18	30DC12496	1180	62.9	38.4	81.16667	1
19	31DOR500	1508.966	71.1	35	87	1
20	32DOR500	2317.464	60.1	35.8	64.63333	1



ASREML
Breeding values

Genomic testing

Field trials
PC

Selection index (optimised economic weights)

<https://bkinghor.une.edu.au/desire.htm>



CKT, Fe, Zn
Alliance-Uganda Lab

Optimized crossing list

Common bean mid-density genotyping services

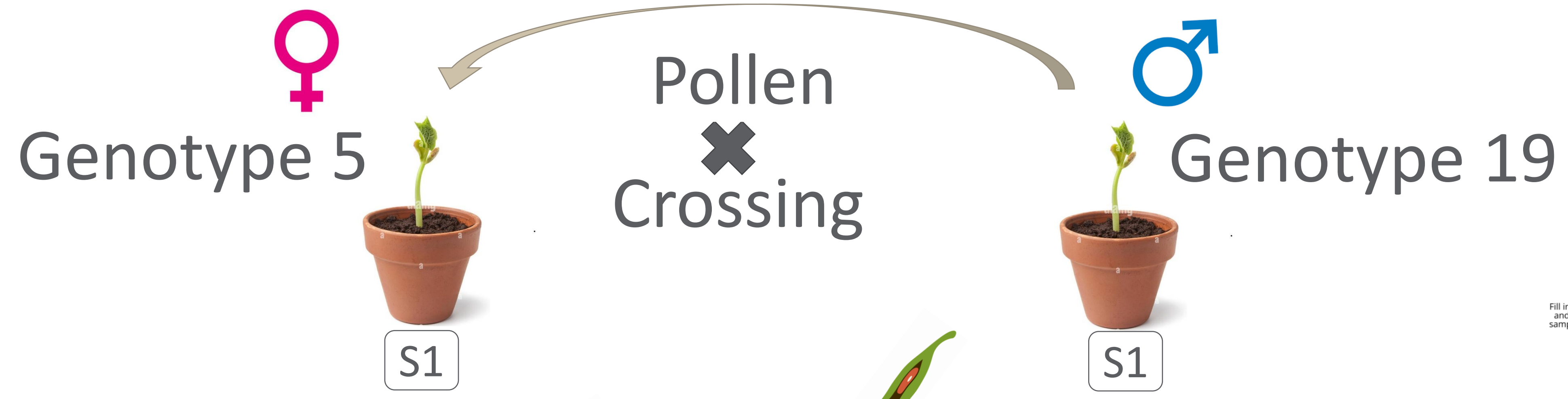
Services

Genotyping / sequencing tools and services

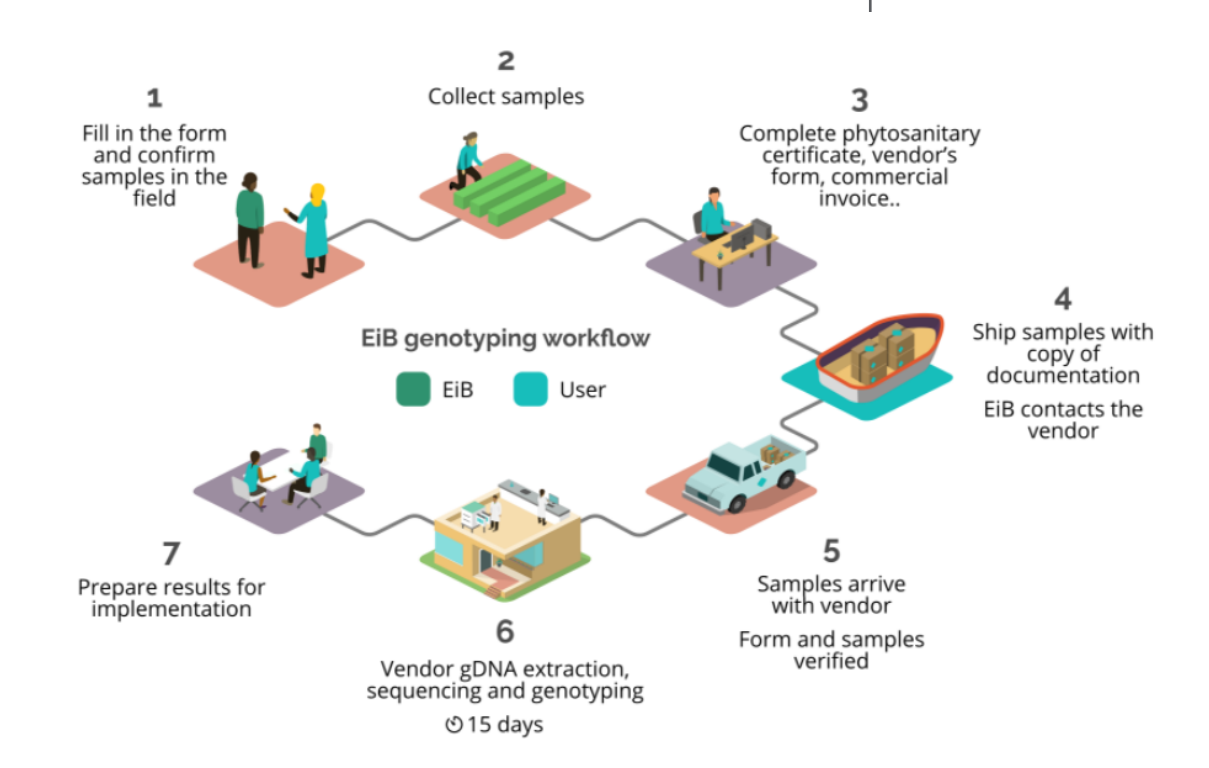
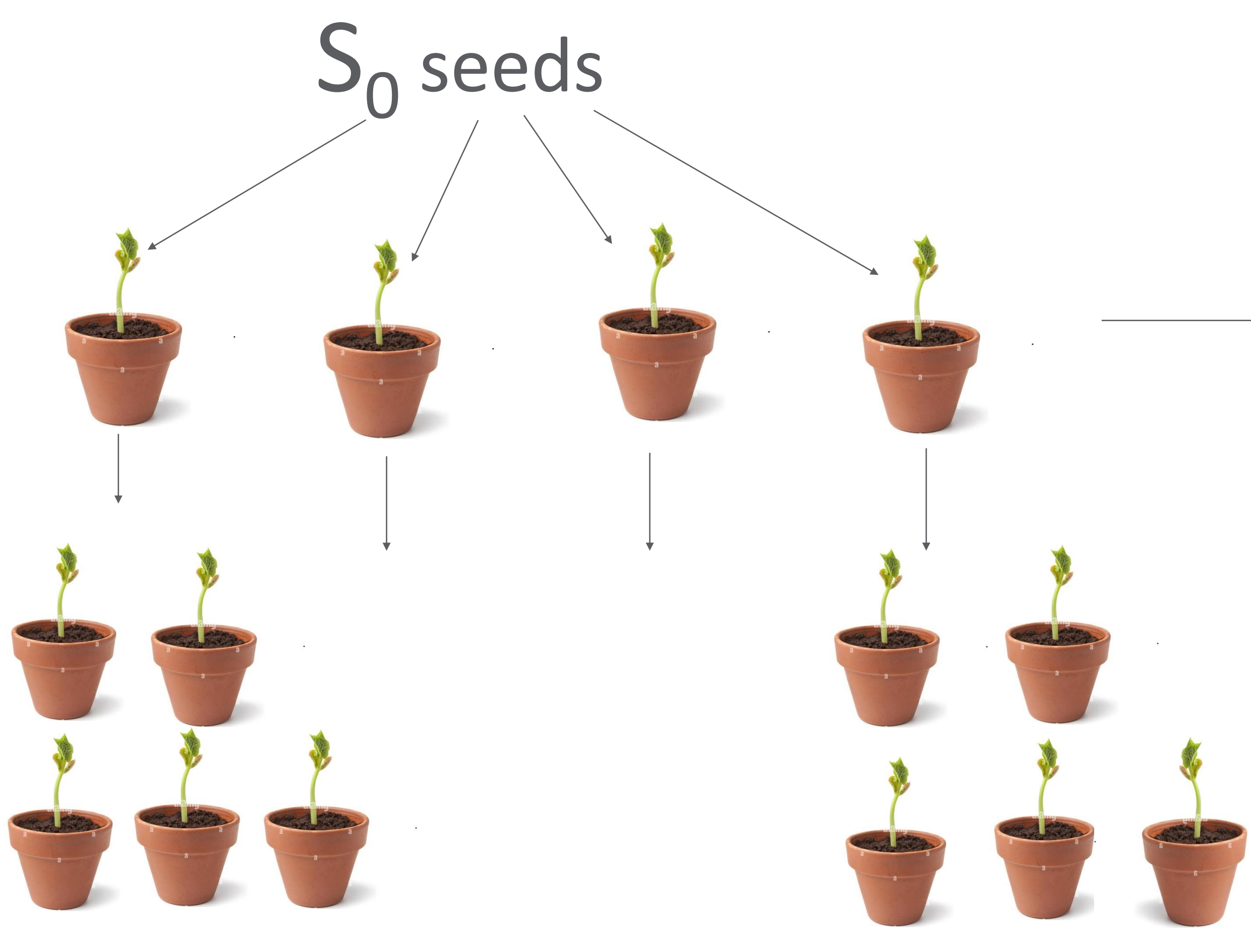
Genotyping panel containing 1,851 SNP markers distributed evenly throughout the 11 chromosomes of common bean (*Phaseolus vulgaris* L.). This panel is suitable for marker-assisted breeding, diversity analyses and germplasm management applications.

The common bean mid-density marker panel was developed from sequencing data of 1,700 breeding lines and landraces belonging to different breeding nurseries for biotic and abiotic resistance, commercial and agronomic traits, interspecific introgressions, and major representation from America and Africa breeding programs. Genotyped through whole genome re-sequencing (WGS) and Genotyping-by-Sequencing (GBS) the combined genotypic matrix was produced assembling different sequencing efforts for diversity studies, pathogen resistance, cooking time, drought and heat

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Self progeny seeds | S₀ cross progeny seeds



Leaf samples



<https://alliancebioversityciat.org/>



<https://www.pabra-africa.org/>



<https://www.uwa.edu.au/>



Australian Government
Australian Centre for International Agricultural Research

<https://www.aciar.gov.au/>