

Supplementary Table 1: List and source of the 150 soybean genotypes used for the study

Genotype	Flowering type	Maturity group	Source	Genotype	Flowering type	Maturity group	Source
FT CRISTALINE (check)	Determinate	V	USA	SAR-SL2/USL-18-2	Determinate	IV-V	Ghana
BRS TIANA (check)	Determinate	VI	USA	<i>Afayak</i>	Determinate	IV-V	Ghana
TGX 1903 – 7F	Determinate	V	IITA-Nigeria	SAR-SL2/SPG-18-1	Determinate	V	Ghana
TGX 1844-19F	Determinate	V	IITA-Nigeria	SAR-Jen/USL-18-3	Determinate	IV-V	Ghana
TGX 1989-20F	Determinate	V	IITA-Nigeria	SAR-SL2/USL-18-1	Determinate	IV-V	Ghana
TGX 1988-3F	Determinate	IV	IITA-Nigeria	SAR-SL2/SPG-18-2	Determinate	V-VI	Ghana
TGX 1990 – 57F	Determinate	V	IITA-Nigeria	SAR-Qua/Afa-18-6	Determinate	IV	Ghana
TGX 2017-6E	Determinate	VI	IITA-Nigeria	5205	Determinate	IV	Columbia
TGX 1990-93F	Determinate	V	IITA-Nigeria	5207	Determinate	IV-V	Columbia
TGX 2019-1E	Determinate	VI	IITA-Nigeria	5212	Determinate	IV-V	Columbia
TGX 1485-1D-C	Determinate	IV	IITA-Nigeria	5226	Indeterminate	IV	Columbia
TGX 2009-16F	Determinate	V	IITA-Nigeria	5229	Determinate	IV-V	Columbia
TGX 1989-19F	Determinate	V	IITA-Nigeria	5232	Indeterminate	V	Columbia
TGX 2009-12F	Determinate	V	IITA-Nigeria	5235	Determinate	IV	Columbia
TGX 2017-5E	Determinate	VI	IITA-Nigeria	5239	Indeterminate	V	Columbia
<i>Favour</i> (check)	Determinate	V	Ghana	5246	Determinate	IV-V	Columbia
TGX 1740 - 2F	Determinate	V	IITA-Nigeria	5249	Determinate	V	Columbia
TGX 1989-75FN	Determinate	V	IITA-Nigeria	5504	Indeterminate	V	Columbia
TGX 1990-110FN	Determinate	V	IITA-Nigeria	5505	Indeterminate	IV-V	Columbia
TGX 1990-95F	Determinate	V	IITA-Nigeria	5506	Determinate	IV	Columbia
TGX 1989-11F	Determinate	V	IITA-Nigeria	5508	Indeterminate	IV-V	Columbia
TGX 1989-45F	Determinate	V	IITA-Nigeria	5509	Indeterminate	V	Columbia
TGX 1740-2F	Determinate	V	IITA-Nigeria	5510	Indeterminate	IV	Columbia
TGX 1990-78F	Determinate	V	IITA-Nigeria	5511	Indeterminate	IV-V	Columbia
TGX 1989-53FN	Determinate	V	IITA-Nigeria	5512	Indeterminate	IV-V	Columbia
TGX 1989-42F	Determinate	V	IITA-Nigeria	5514	Indeterminate	IV	Columbia
TGX 1990-40F	Determinate	V	IITA-Nigeria	5516	Indeterminate	IV-V	Columbia
TGX 1990-114FN	Determinate	V	IITA-Nigeria	5518	Determinate	V	Columbia
TGX 1989-40F	Determinate	V	IITA-Nigeria	5519	Determinate	IV	Columbia
TGX 1988-5E	Determinate	VI	IITA-Nigeria	5520	Determinate	IV-V	Columbia
TGX 1987-62F	Determinate	V	IITA-Nigeria	5521	Determinate	V	Columbia
TGX 1989-49FN	Determinate	V	IITA-Nigeria	5522	Determinate	IV	Columbia

TGX 1990-55F	Determinate	V	IITA-Nigeria	5524	Indeterminate	IV-V	Columbia
TGX 1990-46F	Determinate	V	IITA-Nigeria	5525	Indeterminate	IV-V	Columbia
TGX 1993-4FN	Determinate	V	IITA-Nigeria	5527	Determinate	IV	Columbia
TGX 1989-48FN	Determinate	V	IITA-Nigeria	5528	Determinate	IV-V	Columbia
TGX 1989-68FN	Determinate	V	IITA-Nigeria	5530	Determinate	V	Columbia
TGX 1990-57F	Determinate	V	IITA-Nigeria	5532	Determinate	IV	Columbia
<i>Soung Pungun</i> (check)	Determinate	V	Ghana	5533	Determinate	IV-V	Columbia
TGX 1835-10E	Determinate	VI	IITA-Nigeria	5534	Determinate	IV-V	Columbia
TGX 1990-21F	Determinate	V	IITA-Nigeria	5536	Determinate	V	Columbia
TGX 1990-52F	Determinate	V	IITA-Nigeria	5537	Determinate	V	Columbia
<i>Jenguma</i> (check)	Determinate	V	Ghana	5538	Determinate	IV	Columbia
5541	Determinate	IV	Columbia	PI 628877	Determinate	IV	USA
5542	Determinate	IV	Columbia	PI 628836	Determinate	IV-V	USA
5543	Indeterminate	IV	Columbia	PI 628918	Determinate	IV-V	USA
5544	Determinate	V	Columbia	PI 628848 C	Determinate	IV-V	USA
5545	Determinate	IV	Columbia	PI 628882	Determinate	V	USA
5546	Determinate	IV	Columbia	PI 628885	Determinate	V	USA
5549	Indeterminate	V	Columbia	PI 628910	Determinate	III	USA
5554	Determinate	IV	Columbia	PI 548659	Determinate	III	USA
5555	Indeterminate	V	Columbia	PI 567090	Determinate	IV	USA
5560	Determinate	IV	Columbia	PI 628876	Determinate	IV	USA
5561	Determinate	IV	Columbia	PI 628835	Determinate	IV	USA
PI 628854	Determinate	IV	USA	PI 628811	Determinate	IV	USA
PI 567789	Determinate	V	USA	PI 628838	Determinate	IV	USA
PI 567104 B	Determinate	IV	USA	PI 628812	Determinate	V	USA
PI 567374	Determinate	III	USA	PI 597468	Determinate	V	USA
PI 628849	Determinate	V	USA	PI 628886	Determinate	IV	USA
			USA				USA
PI 567056 A	Determinate	III		PI 628852	Determinate	V	
PI 567024	Determinate	IV	USA	PI 533605	Determinate	III	USA
PI 628874	Determinate	V	USA	PI 567099 A	Determinate	IV	USA
PI 628803	Determinate	IV	USA	PI 628860	Determinate	V	USA
PI 483253	Determinate	II	USA	PI 628864	Determinate	IV	USA
PI 567315	Determinate	IV	USA	PI 548654	Determinate	III	USA
PI 628906	Indeterminate	V	USA	PI 628847	Determinate	V	USA

PI 567053	Determinate	III	USA	PI 594538 A	Determinate	V	USA
PI 628873	Determinate	V	USA	PI 628814	Determinate	IV	USA
PI 628866	Determinate	IV	USA	PI 578330	Determinate	IV	USA
PI 617045	Determinate	V	USA	PI 628875	Determinate	V	USA
PI 628816	Determinate	IV	USA	PI 628862	Indeterminate	IV	USA
PI 628813	Determinate	IV	USA	PI 594540	Determinate	V	USA
PI 628881	Determinate	V	USA	PI 628806	Indeterminate	IV	USA
PI 628919	Determinate	V	USA	PI 628840	Determinate	IV	USA
PI 628805	Indeterminate	IV	USA	PI 483251	Determinate	II	USA

II= Early maturity, III= Early-medium maturity, IV= Medium maturity, V= Medium-late maturity, VI= Late maturity

The maturity group information for the soybean genotypes was obtained the following sources:

1. United States Department of Agriculture (USDA) - Germplasm Resources Information Network (GRIN)
2. National Agricultural Library (NAL) – USDA
3. Soybean Research Database - University of Illinois
4. International Soybean Genome Consortium (ISGC)
5. National Center for Biotechnology Information (NCBI)
6. PlantGDB - Plant Genome Database
7. SoyBase - Soybean Genome Database