

**Core collection of two important indigenous vegetables; Gboma eggplant (*Solanum macrocarpon* L.) and Jute mallow (*Corchorus olitorius* L.) in Africa: An important step for exploitation of existing germplasm and development of improved cultivars**

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Supplementary Fig 1: Photographs showing variations in shapes of leaf. **A.** broad shape of *Corchorus olitorius* has ovate or egg shape leaf blade that is narrow at the top than the base. **B.** Round shape of *Corchorus olitorius* has the leaf blade almost circular in outline with the diameter of the top and the base being the same. **C.** Narrow shape of *Corchorus olitorius* has the leaf blade as heart shape with the wide part of the blade attached at the base.



Supplementary Fig 2: Variations in surface type of leaves. **A.** Glabrous surfaces of *Corchorus olitorius* are smooth and not hairy. **B.** Pubescent surfaces of *Corchorus olitorius* are covered with erect hairs

Supplementary Table 1: Core collections of the 106 accessions of *Corchorus olitorius*

Cluster	Genotypes	Core collection	Origin
I	KNUSTC09, KNUSTC70, KNUSTC26, KNUSTC69, KNUSTC13, KNUSTC52, KNUSTC09, KNUSTC70, KNUSTC26, KNUSTC69, KNUSTC13, KNUSTC52, KNUSTC41, KNUSTC89, KNUSTC48, KNUSTC19, KNUSTC91, KNUSTC30, KNUSTC76, KNUSTC42, KNUSTC88, KNUSTC34, KNUSTC94, KNUSTC08, KNUSTC39, KNUSTC12, KNUSTC60, KNUSTC92, KNUSTC03, KNUSTC78, KNUSTC47, KNUSTC61, KNUSTC21, KNUSTC44, KNUSTC51, KNUSTC62	KNUSTC03 KNUSTC09 KNUSTC52 KNUSTC61 KNUSTC70 KNUSTC94	Denu Tadzewu Begoro Assin Fosu Mampong Ashanti Tamale
II	KNUSTC65, KNUSTC101, KNUSTC85, KNUSTC66, KNUSTC37, KNUSTC67, KNUSTC05, KNUSTC40, KNUSTC58, KNUSTC04, KNUSTC102	KNUSTC58 KNUSTC101	Assin Fosu Bolgatanga
III	KNUSTC25, KNUSTC01, KNUSTC59, KNUSTC63, KNUSTC06, KNUSTC38, KNUSTC02, KNUSTC74, KNUSTC50, KNUSTC93, KNUSTC79, KNUSTC20, KNUSTC99, KNUSTC97, KNUSTC98, KNUSTC32, KNUSTC22, KNUSTC103, KNUSTC100, KNUSTC104, KNUSTC07, KNUSTC95, KNUSTC105, KNUSTC16, KNUSTC82, KNUSTC28, KNUSTC81, KNUSTC55, KNUSTC90, KNUSTC31, KNUSTC75, KNUSTC84, KNUSTC29, KNUSTC36, KNUSTC45, KNUSTC77, KNUSTC54, KNUSTC17, KNUSTC18, KNUSTC27, KNUSTC43, KNUSTC23, KNUSTC11, KNUSTC24, KNUSTC33, KNUSTC68, KNUSTC56, KNUSTC86, KNUSTC64, KNUSTC14, KNUSTC10, KNUSTC49, KNUSTC87, KNUSTC80, KNUSTC72, KNUSTC73, KNUSTC53, KNUSTC57, KNUSTC74, KNUSTC35, KNUSTC83, KNUSTC46, KNUSTC15, KNUSTC96, KNUSTC106	KNUSTC16 KNUSTC22 KNUSTC25 KNUSTC35 KNUSTC37 KNUSTC40 KNUSTC49 KNUSTC68 KNUSTC96 KNUSTC100 KNUSTC106	Keta Kpeve Akatsi Somanya Dodowa Nsawam Begoro Sefwi Wiawso Tamale Bolgatanga Wa

Supplementary Table 2: Core collections of the 18 accessions of *Solanum macrocarpon*

Sub-Cluster	Genotypes	Core collection	Origin
<u>Cluster I</u>			
I	KNUSTG01, KNUST02, KNUSTG07, KNUSTG13, KNUSTG16	KNUSTG01	Denu
II	KNUSTG03, KNUSTG17,	KNUSTG17	Begoro
III	KNUSTG09, KNUSTG12	KNUSTG09	Tadzewu
<u>Cluster II</u>			
I	KNUSTG04	KNUSTG04	Agbozume
II	KNUSTG05, KNUSTG08, KNUSTG14, KNUSTG15, KNUSTG18	KNUSTG14	Somanya
III	KNUSTG06, KNUSTG10	KNUSTG06	Agbozume
IV	KNUSTG11	KNUSTG11	Keta

Supplementary Table 3. List of locations and ethnic groups of the villages and towns the jute mallow accessions were collected from

Accessions	Villages	District	Region
KNUSTC01, KNUSTC02, KNUSTC03, KNUSTC04	Denu	Ketu south municipality	Volta
KNUSTC05, KNUSTC06, KNUSTC07, KNUSTC08	Agbozume	Ketu south municipal	Volta
KNUSTC09, KNUSTC10, KNUSTC11, KNUSTC12, KNUSTC13	Tadzewu	Ketu north	Volta
KNUSTC14, KNUSTC15, KNUSTC16, KNUSTC17,	Keta	Keta municipal	Volta
KNUSTC18, KNUSTC19, KNUSTC20, KNUSTC21, KNUSTC22	Kpeve	South Dayi	Volta
KNUSTC23, KNUSTC24, KNUSTC25, KNUSTC26, KNUSTC27	Akatsi	Akatsi District	Volta
KNUSTC28, KNUSTC29, KNUSTC30, KNUSTC31	Sogakope	South Tongu District	Volta
KNUSTC32, KNUSTC33, KNUSTC34, KNUSTC35, KNUSTC36	Somanya	Yilo Krobo District	Eastern
KNUSTC37, KNUSTC38, KNUSTC39	Dodowa	Shai Osudoku	Greater Accra
KNUSTC40, KNUSTC41, KNUSTC42, KNUSTC43, KNUSTC44	Nsawam	Akuapem South	Eastern
KNUSTC45, KNUSTC46, KNUSTC47, KNUSTC48	Kibi	East Akim Municipal	Eastern
KNUSTC49, KNUSTC50, KNUSTC51, KNUSTC52	Begoro	Fanteakwa South	Eastern
KNUSTC53, KNUSTC54, KNUSTC55, KNUSTC56	Osino	Fanteakwa South	Eastern
KNUSTC57, KNUSTC58, KNUSTC59, KNUSTC60, KNUSTC61	Assin Fosu	Assin North	Central
KNUSTC62, KNUSTC63, KNUSTC64, KNUSTC65, KNUSTC66	Sefwi Wiawso	Sefwi Wiawso District	Western
KNUSTC67, KNUSTC68, KNUSTC69, KNUSTC70, KNUSTC71	Mampong Ashanti	Asante Mampong Municipal	Ashanti
KNUSTC72, KNUSTC73, KNUSTC74, KNUSTC75, KNUSTC76	Woraso	Asante Mampong Municipal	Ashanti
KNUSTC77, KNUSTC78, KNUSTC79, KNUSTC80, KNUSTC81	Ejura	Ejura/Sekyedumase District	Ashanti
KNUSTC82, KNUSTC83, KNUSTC84, KNUSTC85, KNUSTC86	Tepa	Ahafo Ano North District	Ashanti
KNUSTC87, KNUSTC88, KNUSTC89, KNUSTC90, KNUSTC91	Atebubu	Atebubu District	Brong Ahafo
KNUSTC92, KNUSTC93, KNUSTC94, KNUSTC95, KNUSTC96	Tamale	Tamale metropolitan	Northern
KNUSTC97, KNUSTC98, KNUSTC99, KNUSTC100, KNUSTC101	Bolgatanga	Bolgatanga municipal	Upper East
KNUSTC102, KNUSTC103, KNUSTC104, KNUSTC105, KNUSTC106	Wa	Wa municipal	Upper West

Supplementary Table 4. List of locations and ethnic groups of the villages and towns the gboma accessions were collected from

Accessions	Villages	District	Region
KNUSTG01, KNUSTG02, KNUSTG03	Denu	Ketu south municipality	Volta
KNUSTG04, KNUSTG05, KNUSTG06	Agbozume	Ketu south municipal	Volta
KNUSTG07, KNUSTG08, KNUSTG09	Tadzewu	Ketu north	Volta
KNUSTG10, KNUSTG11, KNUSTC12	Keta	Keta municipal	Volta
KNUSTG13, KNUSTG14, KNUSTG15	Somanya	Yilo Krobo District	Eastern
KNUSTG16, KNUSTG17, KNUSTG18	Begoro	Fanteakwa South	Eastern



Supplementary Figure 3: Map of Ghana showing the locations the accessions of jute mallow and gboma were collected from.