

Supplemental data for:

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Supplemental Table 1. Roselle accessions collected from different Darfur states and their collection years and characterization seasons

Accession	State from where the accession was collected	Collection year	Characterization season
HSD13012	Central Darfur	2014	2018 - 2019
HSD13024	Central Darfur	2014	2018 - 2019
HSD13028	Central Darfur	2014	2018 - 2019
HSD13046	Central Darfur	2014	2018 - 2019
HSD13120	Central Darfur	2014	2018 - 2019
HSD13121	Central Darfur	2014	2018 - 2019
HSD13132	Central Darfur	2014	2018 - 2019
HSD13158	Central Darfur	2014	2018 - 2019
HSD13167	Central Darfur	2014	2018 - 2019
HSD13447	Central Darfur	2014	2018 - 2019
HSD13627	West Darfur	2015	2018 - 2019
HSD13628	West Darfur	2015	2018 - 2019
HSD13634	West Darfur	2015	2018 - 2019
HSD13638	West Darfur	2015	2018 - 2019
HSD13647	West Darfur	2015	2018 - 2019
HSD13666	West Darfur	2015	2018 - 2019
HSD13668	West Darfur	2015	2018 - 2019
HSD13674	West Darfur	2015	2018 - 2019
HSD13680	West Darfur	2015	2018 - 2019
HSD13687	West Darfur	2015	2018 - 2019
HSD13690	West Darfur	2015	2018 - 2019
HSD13695	West Darfur	2015	2018 - 2019
HSD13696	West Darfur	2015	2018 - 2019
HSD13705	West Darfur	2015	2018 - 2019
HSD13709	West Darfur	2015	2018 - 2019

Accession	State from where the accession was collected	Collection year	Characterization season
HSD13721	West Darfur	2015	2018 - 2019
HSD13727	West Darfur	2015	2018 - 2019
HSD13742	West Darfur	2015	2018 - 2019
HSD13754	West Darfur	2015	2018 - 2019
HSD13756	West Darfur	2015	2018 - 2019
HSD13769	West Darfur	2015	2018 - 2019
HSD13775	West Darfur	2015	2018 - 2019
HSD13786	West Darfur	2015	2018 - 2019
HSD13793	West Darfur	2015	2018 - 2019
HSD13799	West Darfur	2015	2018 - 2019
HSD13808	West Darfur	2015	2018 - 2019
HSD13818	West Darfur	2015	2018 - 2019
HSD15022	Central Darfur	2014	2018 - 2019
HSD17590	North Darfur	2019	2020 - 2021
HSD17640	North Darfur	2019	2020 - 2021
HSD17690	North Darfur	2019	2020 - 2021
HSD17691	North Darfur	2019	2020 - 2021
HSD17703	North Darfur	2019	2020 - 2021
HSD17731	North Darfur	2019	2020 - 2021
HSD17733	North Darfur	2019	2020 - 2021
HSD17740	North Darfur	2019	2020 - 2021
HSD17741	North Darfur	2019	2020 - 2021
HSD17831	South Darfur	2019	2020 - 2021
HSD17832	North Darfur	2019	2020 - 2021
HSD17842	North Darfur	2019	2020 - 2021
HSD17843	North Darfur	2019	2020 - 2021
HSD17849	North Darfur	2019	2020 - 2021
HSD17850	North Darfur	2019	2020 - 2021
HSD17863	North Darfur	2019	2020 - 2021
HSD17878	North Darfur	2019	2020 - 2021

Accession	State from where the accession was collected	Collection year	Characterization season
HSD17882	North Darfur	2019	2020 - 2021
HSD17954	East Darfur	2020	2021 - 2022
HSD17958	East Darfur	2020	2021 - 2022
HSD17961	East Darfur	2020	2021 - 2022
HSD17962	East Darfur	2020	2021 - 2022
HSD17969	East Darfur	2020	2021 - 2022
HSD17979	East Darfur	2020	2021 - 2022
HSD17987	East Darfur	2020	2021 - 2022
HSD17988	East Darfur	2020	2021 - 2022
HSD17989	East Darfur	2020	2021 - 2022
HSD17990	East Darfur	2020	2021 - 2022
HSD17997	East Darfur	2020	2021 - 2022
HSD18008	East Darfur	2020	2021 - 2022
HSD18009	East Darfur	2020	2021 - 2022
HSD18011	East Darfur	2020	2021 - 2022
HSD18017	East Darfur	2020	2021 - 2022
HSD18021	East Darfur	2020	2021 - 2022
HSD18022	East Darfur	2020	2021 - 2022
HSD18028	East Darfur	2020	2021 - 2022
HSD18029	East Darfur	2020	2021 - 2022
HSD18040	East Darfur	2020	2021 - 2022
HSD18049	East Darfur	2020	2021 - 2022
HSD18051	East Darfur	2020	2021 - 2022
HSD18073	East Darfur	2020	2021 - 2022
HSD18074	East Darfur	2020	2021 - 2022
HSD18076	East Darfur	2020	2021 - 2022
HSD18077	East Darfur	2020	2021 - 2022

Supplemental Table 2. Passport and Characterization Data and Clustering Groups of Roselle Accessions from Darfur Region

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD13012	1	12.87	22.90	Central Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green	8-10	Pinkish	Light red	Fully open calyx with lobes pointing upwards
HSD13024	2	13.03	22.97	Central Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards
HSD13028	3	13.05	23.02	Central Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards
HSD13046	4	12.97	24.02	Central Darfur	B2	Medium	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards
HSD13120	5	13.05	23.63	Central Darfur	B2	Erect	Slight	Green with red patches	Deeply incised narrowly lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards
HSD13121	6	13.05	23.63	Central Darfur	B2	Erect	Slight	Green with red patches	Deeply incised narrowly lobed	Green	8-10	Pinkish	Red	Fully closed rounded calyx
HSD13132	7	13.70	23.70	Central Darfur	B2	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	8-10	Pinkish	Red	Slightly open calyx
HSD13158	8	12.78	23.52	Central Darfur	B2	Erect	Slight	Green with red patches	Non-lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD13167	9	12.70	23.45	Central Darfur	B2	Erect	Slight	Green with red patches	Deeply incised narrowly lobed	Green with red veins	8-10	Pinkish	Light red	Slightly open calyx
HSD13447	10	12.93	23.60	Central Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green with red veins, red	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards
HSD13627	11	13.32	22.37	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green with red veins, red	5-7	Pinkish	Red	Fully open calyx with lobes curving outwards
HSD13628	12	13.32	22.37	West Darfur	A	Medium	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13634	13	13.30	22.37	West Darfur	A	Medium	Slight	Green	Deeply incised narrowly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13638	14	13.18	22.27	West Darfur	A	Medium	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13647	15	13.13	22.37	West Darfur	B3	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	White	White	Partially open calyx with lobes bending inwards
HSD13666	16	12.92	21.88	West Darfur	A	Medium	Slight	Green	Deeply incised narrowly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13668	17	12.92	21.88	West Darfur	B2	Medium	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green	8-10	Pinkish	Red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/ Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD13674	18	12.70	21.88	West Darfur	B2	Medium	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Redish	8-10	Pinkish	Light red	Slightly open calyx
HSD13680	19	12.70	21.90	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	Pinkish	Red	Slightly open calyx
HSD13687	20	12.68	22.13	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	Pinkish	Light red	Fully closed rounded calyx
HSD13690	21	12.68	22.13	West Darfur	A	Medium	slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13695	22	12.68	22.13	West Darfur	B1	Erect	Glabrous	Green	Deeply incised narrowly lobed	Green	5-7	Pinkish	Red with white patches	Fully closed rounded calyx
HSD13696	23	12.70	22.15	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green	8-10	Pinkish	Light red	Fully closed rounded calyx
HSD13705	24	12.70	22.15	West Darfur	A	Medium	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13709	25	12.68	22.15	West Darfur	A	Medium	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13721	26	12.73	22.20	West Darfur	B2	Medium	Slight	Green with red	Shallowly incised broadly lobed	Green with red	5-7	Pinkish	Dark red	Fully open calyx with lobes curving outwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
								patches, Purple		veins, red				
HSD13727	27	13.47	22.38	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Redish	5-7	Pinkish	Dark red	Fully open calyx with lobes curving outwards
HSD13742	28	13.52	22.32	West Darfur	A	Erect	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Partially open calyx with lobes bending inwards
HSD13754	29	13.57	22.52	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green	8-10	Pinkish	Red	Fully open calyx with lobes pointing upwards
HSD13756	30	13.65	22.13	West Darfur	A	Medium	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13769	31	13.63	22.13	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Shallowly incised broadly lobed	Green with red veins, red	8-10	Pinkish	Red with white patches	Slightly open calyx
HSD13775	32	13.62	22.17	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Redish	5-7	Pinkish	Red	Slightly open calyx
HSD13786	33	13.52	22.53	West Darfur	A	Medium	Slight	Green	Deeply incised narrowly lobed	Green	5-7	White	White	Partially open calyx with lobes bending inwards
HSD13793	34	13.52	22.55	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Redish	8-10	Pinkish	Light red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD13799	35	13.52	22.57	West Darfur	A	Erect	Slight	Green	Shallowly incised broadly lobed	Green	5-7	White	White	Fully open calyx with lobes pointing upwards
HSD13808	36	13.53	22.57	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green with red veins, red	8-10	Pinkish	Light red	Slightly open calyx
HSD13818	37	13.53	22.60	West Darfur	B2	Erect	Slight	Green with red patches, Purple	Deeply incised narrowly lobed	Green with red veins, red	More than 10	Pinkish	Light red	Slightly open calyx
HSD15022	38	13.53	22.60	Central Darfur	B2	Erect	Slight	Purple	Deeply incised narrowly lobed	Redish	8-10	Pinkish	Light red	Slightly open calyx
HSD17590	39	12.70	23.45	North Darfur	B3	Procumbent	Slight	Green, Green with red patches	Shallowly incised broadly lobed	Green, green with red veins	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards, Fully open calyx with lobes curving outwards
HSD17640	40	13.50	25.90	North Darfur	B3	Erect, procumbent	Slight	Green, Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	White	Partially open calyx with lobes bending inwards
HSD17690	41	13.88	25.38	North Darfur	B3	Erect, medium	Slight	Green with red patches	Deeply incised narrowly lobed	Green, green with red veins	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards, Fully open calyx with lobes curving outwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/ Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD17691	42	13.33	23.43	North Darfur	B3	Medium, procumbent	Slight	Green with red patches	Deeply incised narrowly lobed	Green, green with red veins	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards, Fully open calyx with lobes curving outwards
HSD17703	43	14.50	25.62	North Darfur	B3	Erect	Slight	Green with red patches	Deeply incised narrowly lobed, shallowly incised broadly lobed	Green with red patches	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17731	44	13.20	25.53	North Darfur	B3	Medium, procumbent	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17733	45	13.33	25.43	North Darfur	B3	Procumbent	Slight	Green	Shallowly incised broadly lobed	Green	More than 10	Yellow	White, red	Partially open calyx with lobes bending inwards
HSD17740	46	13.95	25.95	North Darfur	B3	Medium, procumbent	Slight	Green with red patches	Deeply incised narrowly lobed	Green with red patches	More than 10	Yellow	White, red	Partially open calyx with lobes bending inwards
HSD17741	47	13.88	25.38	North Darfur	B3	Procumbent	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	White, red	Partially open calyx with lobes bending inwards
HSD17831	48	12.32	25.30	South Darfur	B3	Erect, medium	Slight	Green with red patches	Deeply incised narrowly lobed, shallowly incised broadly lobed	Green, green with red veins	More than 10	Yellow	White, red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD17832	49	13.60	24.57	North Darfur	B3	Erect, medium	Slight	Green with red patches	Deeply incised narrowly lobed	Green, green with red veins	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17842	50	14.93	24.88	North Darfur	B3	Erect, procumbent	Slight	Green with red patches	Deeply incised narrowly lobed	Green with red patches	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17843	51	13.37	25.25	North Darfur	B3	Erect, medium	Slight	Green with red patches	Deeply incised narrowly lobed	Green with red patches	More than 10	Yellow	Red	Slightly open calyx
HSD17849	52	13.37	25.17	North Darfur	B3	Medium, procumbent	Slight	Green, Green with red patches	Deeply incised narrowly lobed	Green, green with red veins	More than 10	Yellow	Red	Slightly open calyx
HSD17850	53	13.18	25.18	North Darfur	B3	Medium	Slight	Green with red patches	Deeply incised narrowly lobed	Green with red patches	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17863	54	13.45	25.92	North Darfur	B3	Procumbent	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	White	Partially open calyx with lobes bending inwards
HSD17878	55	13.60	24.57	North Darfur	B3	Erect, procumbent	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	White	Partially open calyx with lobes bending inwards
HSD17882	56	13.50	24.47	North Darfur	B3	Erect	Slight	Green with red patches	Deeply incised narrowly lobed	Green, green with red veins	More than 10	Yellow	Red	Slightly open calyx, Partially open calyx with lobes bending inwards
HSD17954	57	15.50	24.25	East Darfur	B3	Procumbent	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD17958	58	11.54	26.22	East Darfur	B3	Erect	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17961	59			East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17962	60			East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17969	61			East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17979	62			East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17987	63	11.38	26.14	East Darfur	B3	Procumbent	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17988	64	11.37	26.17	East Darfur	B3	Procumbent	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17989	65	11.37	26.17	East Darfur	B3	Medium	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD17990	66	11.37	26.17	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes curving outwards
HSD17997	67	11.37	26.17	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes curving outwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD18008	68	11.41	26.05	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18009	69	11.39	25.99	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Slightly open calyx
HSD18011	70	11.39	25.99	East Darfur	B3	Procumbent	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes pointing upwards
HSD18017	71	11.39	25.99	East Darfur	B3	Procumbent	Slight	Green	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes pointing upwards
HSD18021	72	11.60	26.09	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes curving outwards
HSD18022	73	11.61	26.07	East Darfur	B3	Erect	Slight	Green with red patches	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes pointing upwards
HSD18028	74	11.61	26.07	East Darfur	B3	Medium	Slight	Green	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Fully open calyx with lobes pointing upwards
HSD18029	75	11.67	25.99	East Darfur	B3	Medium	Slight	Green	Deeply incised narrowly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18040	76	11.67	25.99	East Darfur	B3	Medium	Slight	Green	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18049	77	11.26	26.32	East Darfur	B3	Procumbent	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards

Accession	Numeric Code	Latitude (N)	Longitude (E)	State	Cluster/Sub-cluster	Overall Plant Morphology	Stem pubescence	Stem colour	Leaf shape	Leaf colour	No. of epicalyx segments	Petal colour	Calyx colour	Calyx shape
HSD18051	78	11.26	26.32	East Darfur	B3	Procumbent	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18073	79	11.26	26.32	East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18074	80	11.26	26.52	East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18076	81	11.26	26.52	East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards
HSD18077	82	11.28	26.52	East Darfur	B3	Medium	Slight	Purple	Shallowly incised broadly lobed	Green	More than 10	Yellow	Red	Partially open calyx with lobes bending inwards

Supplemental Table 3. Sets of accessions similar to each other and their sites of collection

Set	Accession	Site of collection
1	HSD13634	West Darfur
	HSD13666	West Darfur
2	HSD13628	West Darfur
	HSD13638	West Darfur
	HSD13690	West Darfur
	HSD13705	West Darfur
	HSD13709	West Darfur
	HSD13756	West Darfur
3	HSD13687	West Darfur
	HSD13696	West Darfur
4	HSD13024	Central Darfur
	HSD13028	Central Darfur
5	HSD13046	Central Darfur
	HSD13668	West Darfur
6	HSD17690	North Darfur
	HSD17691	North Darfur
7	HSD17990	East Darfur
	HSD17997	East Darfur
	HSD18021	East Darfur
8	HSD17962	East Darfur
	HSD18008	East Darfur
9	HSD17961	East Darfur
	HSD17969	East Darfur
	HSD17979	East Darfur
	HSD18073	East Darfur
	HSD18074	East Darfur
	HSD18076	East Darfur
	HSD18077	East Darfur
10	HSD17954	East Darfur
	HSD18049	East Darfur
	HSD18051	East Darfur
11	HSD17987	East Darfur
	HSD17988	East Darfur