Utilizing the genome of the vegetable species *Cleome gynandra* for the development of improved cultivars for the West and East African markets

CHARACTERIZATION RECORD SHEET

(Descriptors for *Gynandropsis gynandra*)

Crop/ species:	***Cleome gynandra* [*Gynandropsis gynandra*]**		
Characterization by:	…….	Date:	…….
Cultivated/spontaneous:	…….	Location/ site:	…….
Plot No. :	…….	Accession No. :	…….
Sowing Date:	…….	Other plant name:	…….
Transplanting Date:	…….	Age (weeks):	…….
Origin of seed:	…….		…….

SEEDLING DATA

1. **Germination period** _____
(no. of days from sowing to first germination)

2. **Anthocyanin coloration of hypocotyl** _____
(when the seedling primary leaves are fully opened and the terminal bud is around 5 mm)
0 = Absent 1 = Present X = Mixture

3. **Hypocotyl color intensity** _____
3 = Light 5 = Medium 7 = Dense X = Mixture

VEGETATIVE DATA

4. **Plant height** (cm) (N=10) _____
(to be measured at the same time for all the accessions 6 to 10 weeks after sowing)

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

5. **Stem diameter at the first branch** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

6. **Growth habit** _____
3 = Upright *(erect narrow crown)* 5 = Intermediate 7 = Spreading *(wide)* 7 = Prostrate X = Mixture

7. **Branching habit** _____

0 = None 3 = Sparse (<= 5) 5 = Intermediate (6-10) 7 = Abundant (> 10)
X = Mixture

8. **Color of main stem** *(Scale from 0=entirely green to 5= entirely purple)* (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

9. **Stem hairiness** _____
3 = Glabrous 5 =Scantly hairy 7 = Moderately hairy 9 = Very hairy or woolly

10. **Leaf blade leaflets** *(dominant number of leaflets per leaf, excluding inflorescence)* _____
3 = Very low (3 leaflets) 5 = Low (4 leaflets) 7 = Intermediate (5 leaflets)
9 = High (6 leaflets) 11= Very high (7 leaflets) X = Mixture

11. **Leaf color** _____
3 = Light green 5 = Green 7 = Dark green X = Mixture

12. **Terminal leaflet shape** _____
3 = Elliptic 5 = Ovate 7 = Lanceolate 9 = Obovate 11 = Oblanceolate
13 = Deltoid 15 = Spatulate X = Mixture

13. **Terminal leaflet length** (cm) (N=10)* _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

14. **Terminal leaflet width** (cm) (N=10)* _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

15. **Petiole length** (cm) (N=10)* _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

16. **Leaf area** (cm^2) (N=10)* _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

17. **Leaf pubescence/ hairiness on upper surface** _____
3 = Not hairy/scabrous 5 = Sparsely hairy 7 = Hairy 9 = Densely hairy
X = Mixture

18. **Color of petiole** _____
1 = Green 3 = Green tinged purple 5 = Purple tinged green 7 = Purple

19. **Oiliness / wax level on leaves and stems** _____
3 = None 5 = Fairly waxy 7 = Very oily/sticky

20. **Upper surface veins** _____
3 = Not depressed 5 = Slightly depressed 7 = Highly depressed

INFLORESCENCE DATA

21. **Flowering date** (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

22. **Flower color** (when fully opened) _____

1 = White 2 = Yellow 3 = Orange
4 = Red 5 = Rose-red 6 = Pink
7 = Purple 8 = Cream X = Mixture

23. **Length of filament** (cm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

24. **Length of gynophore** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

25. **Length of androphore** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

26. **Length of pedicel** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

FRUIT & SEED DATA

First seed harvest date _____

Last seed harvest date _____

27. **Days to fruiting** (no. of days from sowing to mature pods) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

28. **Pod length** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

29. **Pod width** (mm) (N=10) _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

30. **Immature pod color** _____

1 = Green 3 = Green purple 5 = Light purple 7 = Purple

31. **Mature pod color (not dry, bearing mature seeds)** _____

3 = Green 5 = Yellow-green 7 = Yellow 9 = Brown X = Other

32. **Shape of cross-section of mature or nearly mature fruit** _____

3 = Rounded, 5 = Elliptic/oblong

33. **Pod surface** _____

3 = Shiny smooth 5 = Slightly rough 7 = Scabrid (v. rough)

34. **Pod shape** _____

1 = No folds (regular) 3 = With few folds 5 = With many folds

35. **Color of mature healthy seeds** _____

3 = Black 5 = Grey 7 = Other

36. **1000-seeds weight (mg)** _____

Weigh 8 samples of 100 seeds separately- the coefficient of variation should be inferior to 4 in order to consider the average weight – multiply the average weight by 10

_____ _____ _____ _____ _____ _____ _____ _____

YIELD DATA

37. **Total biomass (g)** _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

38. **Edible biomass (g)** _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

39. **Leaf dry matter content (%)** _____

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Remarks (Observation of insect pests or diseases/special forms of flowers etc.)