APPENDICES
APPENDIX

Preparation of stock solutions

The following stock solutions are prepared and used for the different methods.

1. 2 X SSC buffer (Standard saline citrate buffer)

0.3 M Sodium chloride and 0.03 M Sodium citrate. A stock solution containing 17.532 g of sodium chloride and 8.823 g of trisodium citrate in 1000 ml of distilled water was prepared and used.

2. Sorensen's buffer - A : 1/15 M Na HPO$_2$ 4

A stock solution was prepared by dissolving 2.9665 g of Na HPO in 250 ml of distilled water and stored in a refrigerator.

3. Sorensen's buffer - B : 1/15 M KH PO$_2$ 4

A stock solution containing 2.2682 g of KH PO in 250 ml distilled water was prepared and stored in a refrigerator.

4. 1/15 M phosphate buffer

It was prepared by mixing equal volumes of Sorensen's buffer A and B just before use.
5. 1 M NaH PO

This solution was prepared by dissolving 15.601 g of NaH PO in 100 ml of distilled water and pH was adjusted to 4.15.

6. Giemsa stain stock solution

One part of Azure eiosin methylene blue according to Giemsa was added 66 parts of glycerol at 60°C and diluted with 66 parts of methanol. Diluted Giemsa stain was prepared by diluting the above stock solution using Sorensen's buffer (pH 6.8).

7. Quinacrine dihydrochloride solution

2.5 mg of quinacrine dihydrochloride is dissolved in 50 ml of distilled water and mixed well. It is wrapped with aluminium foil and stored in the refrigerator.

8. Extraction buffer

100mM of Tris HCl (pH 7.8) and 10mM of EDTA Na and 500mM of NaCl were dissolved in water and made upto 500ml. The solution was stored in a refrigerator.

9. TE buffer

10mM of Tris HCl (pH 7.5) and 1mM of EDTA Na were dissolved in water, made upto 100ml and stored in a refrigerator.
PLATE VIII

Morphological variations in different species and races of Sorghum

1. *S.intrans*
2. *S.propinquum*
3. *S.bicolor* race *bicolor* cv CO 27
4. *S.bicolor* race *durra* cv CO 18
5. *S.bicolor* race *kafir* cv CK 60B
Morphological variations of different species and races of *Sorghum*
PLATE IX

Morphological variations in different species and races of Sorghum

1. *S. bicolor* race *caudatum* cv K3
2. *S. bicolor* race *kafir-caudatum* cv CO 20
3. *S. purpureo-sericeum*
4. *S. halepense*
5. *S. sudanense*
PLATE IX

Morphological variations in different species and races of 
Sorghum