

Bambara Groundnut Research Activities at IITA

Ousmane Boukar
Cowpea Breeder

OUTLINE OF THE PRESENTATION

- Introduction
- Bambara Groundnut: IITA Genetic Resource Centre
- Preliminary evaluation of Bambara groundnut
- Future prospects

INTRODUCTION



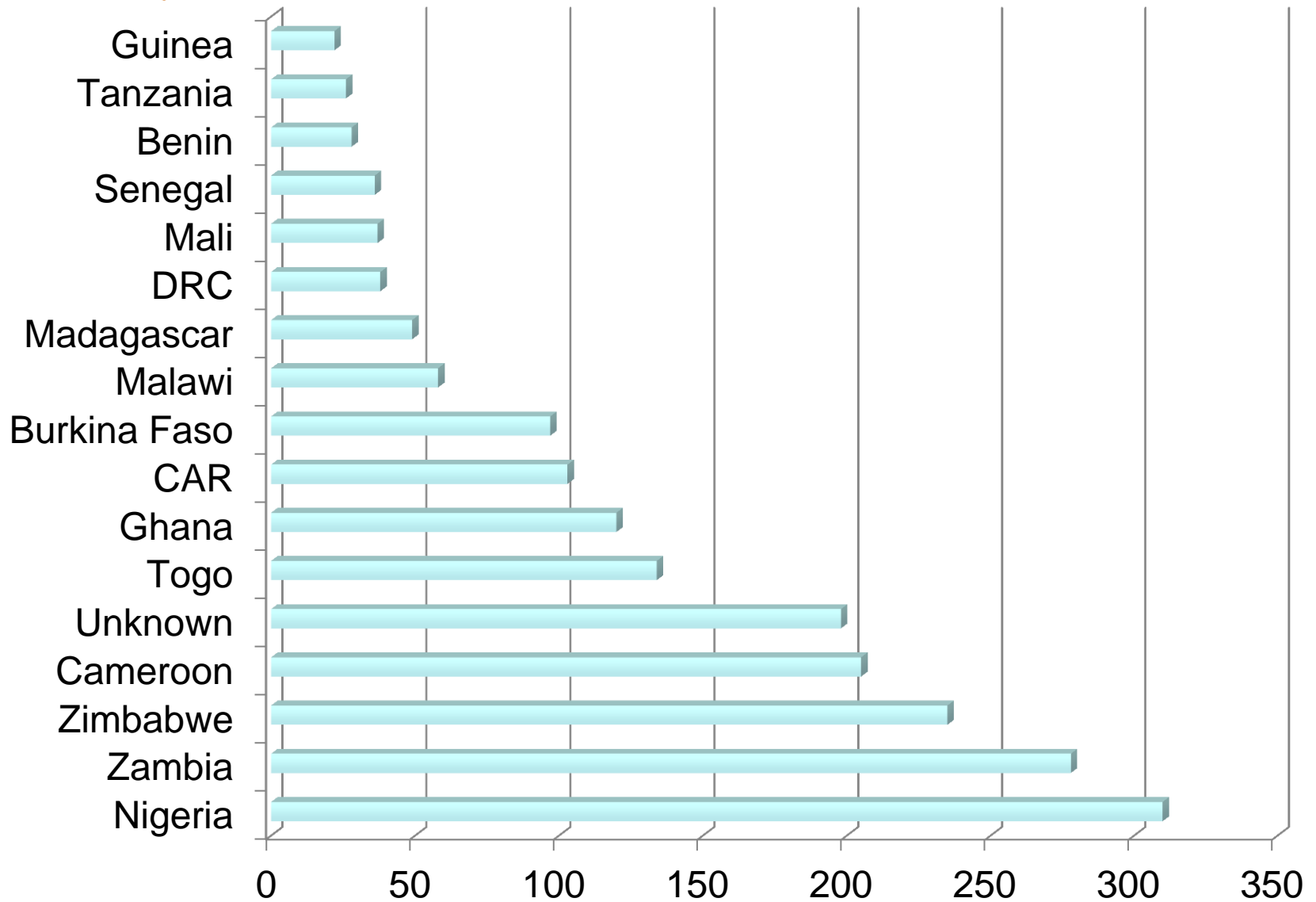
- Important food legume in Africa
 - Source of protein
 - Income for women
- Adapted to poor soil fertility and drought
- Poor statistics

IITA GENETIC RESOURCE CENTRE



- Collection started in 1971
- 1733 germplasm accessions
 - 99% from Africa
 - 16% Nigeria
 - 14% Zambia

Origin of Bambara groundnut collection at IITA

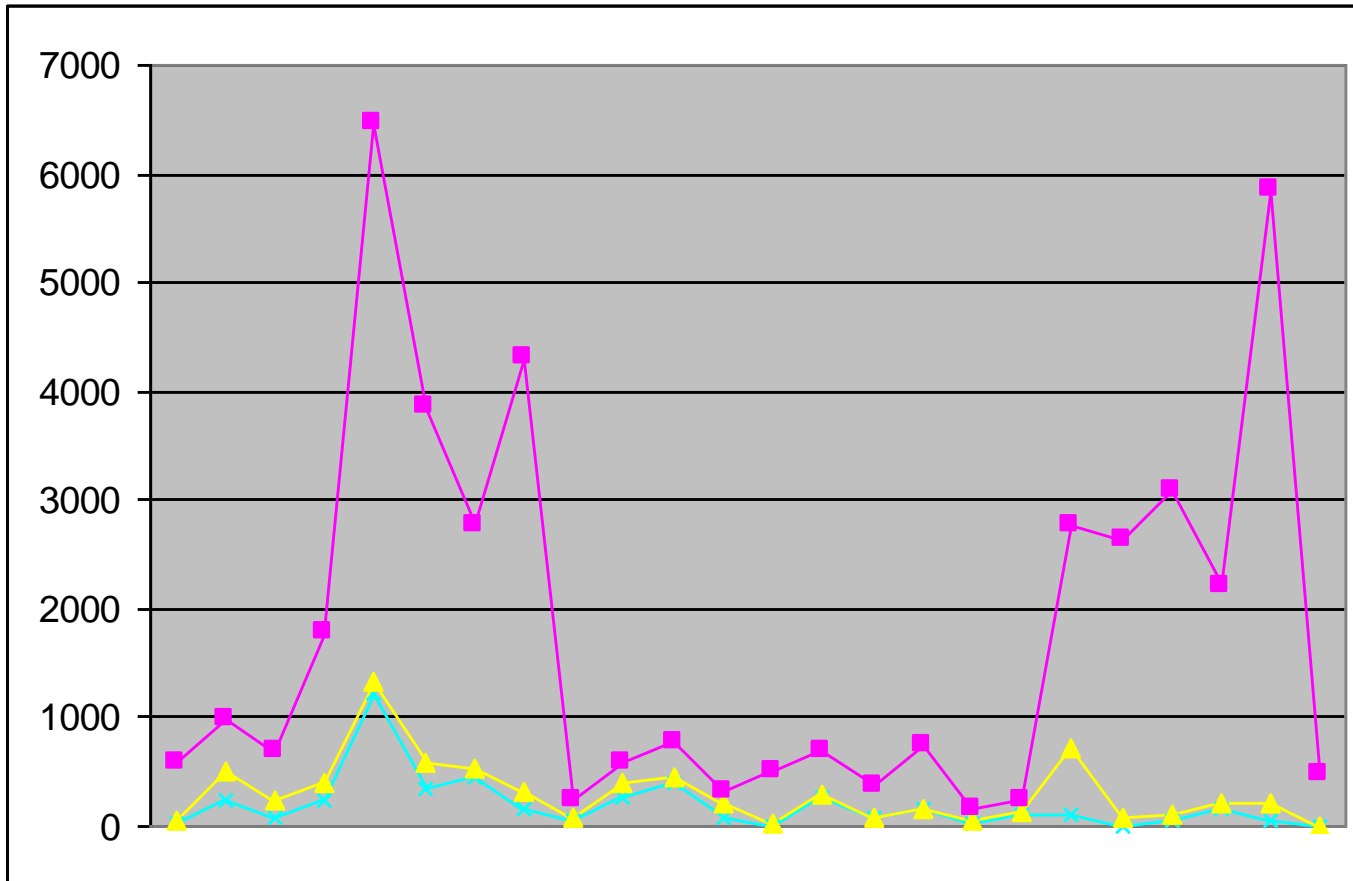




- Characterization
 - 40 descriptors used
 - 99% collection described
- Safe duplication
 - 548 Svalbard (Norway)
 - 140 Saskatoon (Canada)
 - 52 Benin, 1000 Mali and 75 Niger

Distribution

- Volume (1985-2008)



Cowpea

35970 distinct
70% collection

Bambara

2613 distinct
51% collection

Wild vigna

4598 accessions
67% collection

1985

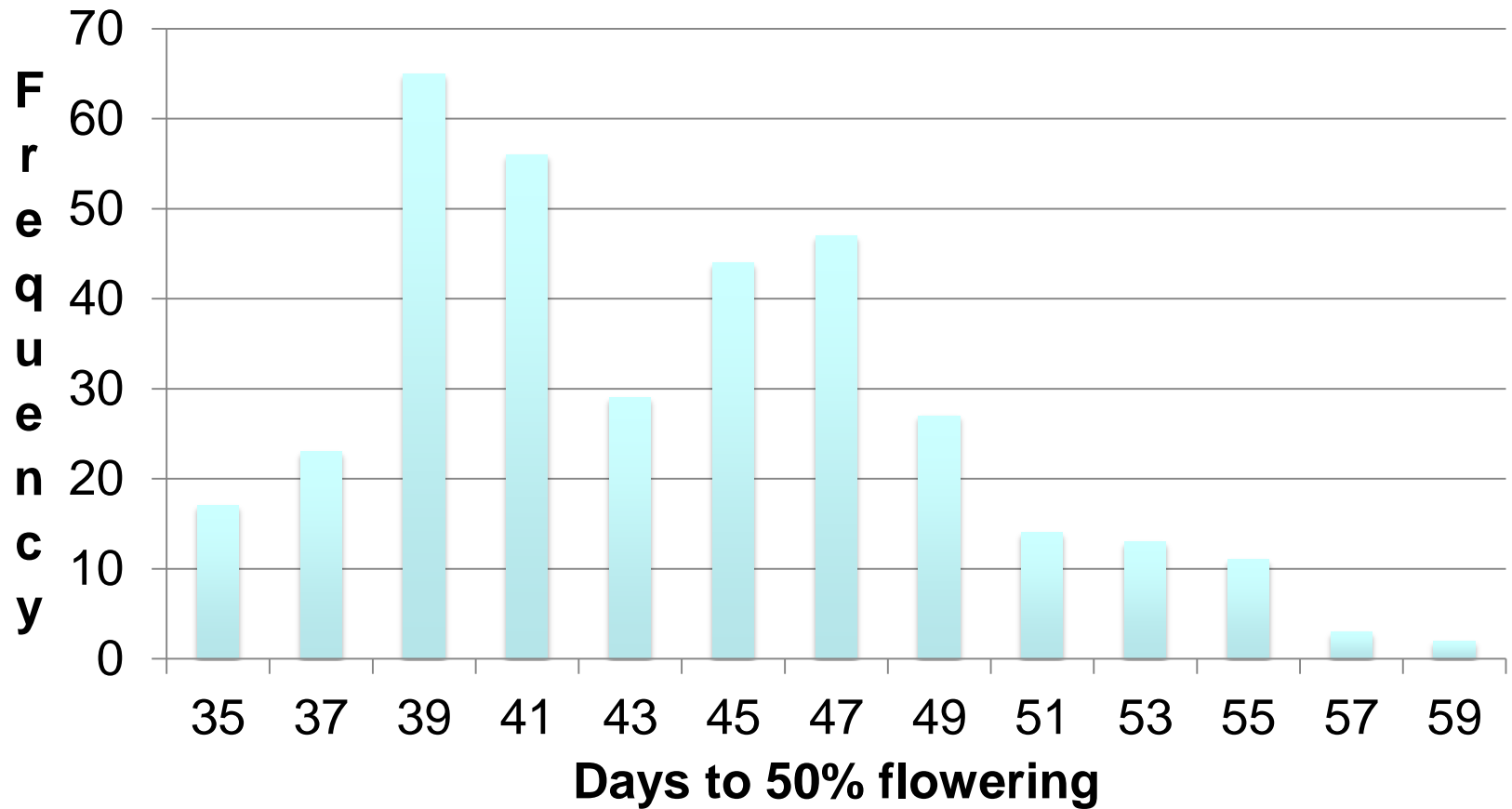
2008

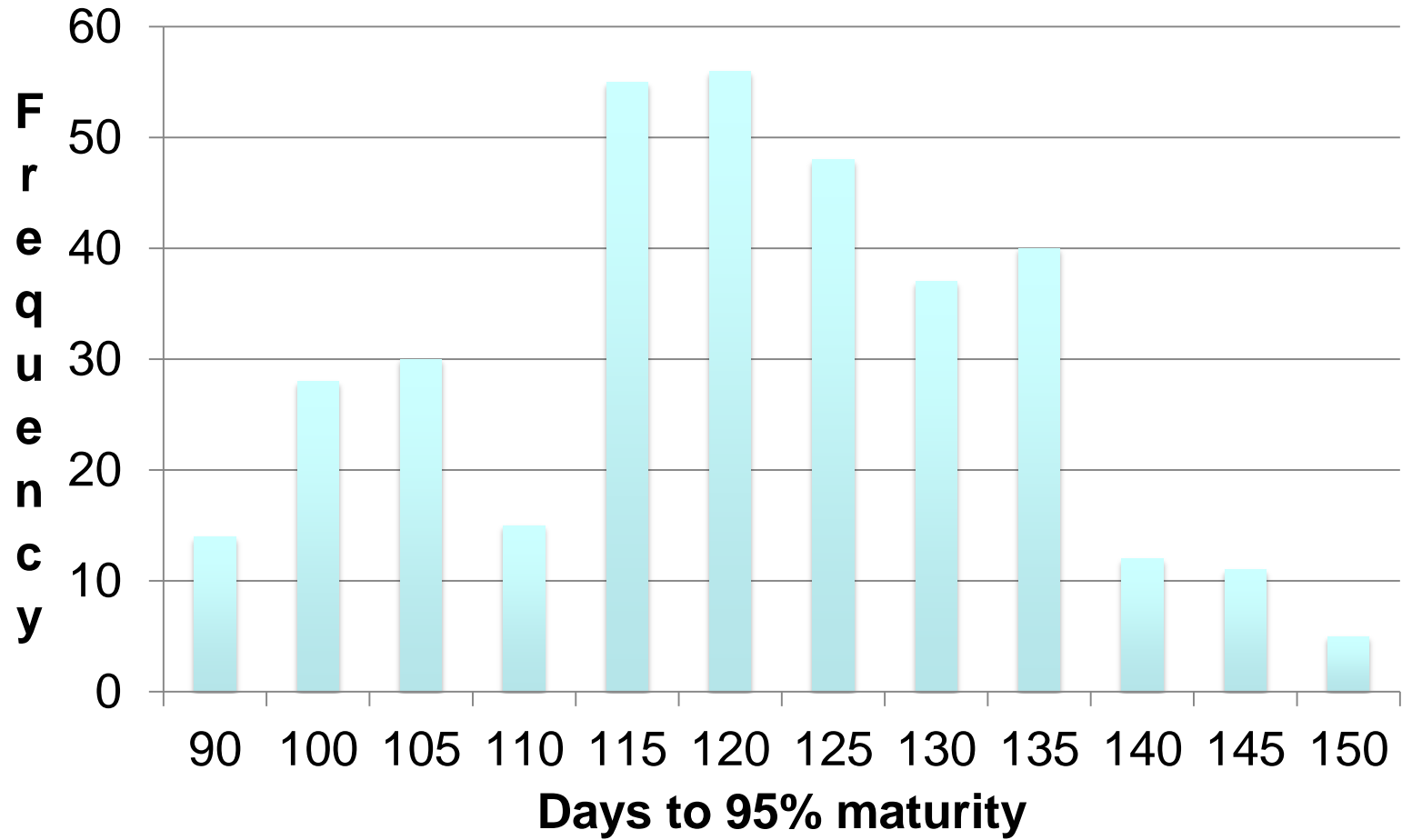
Source: Dumet, 2010

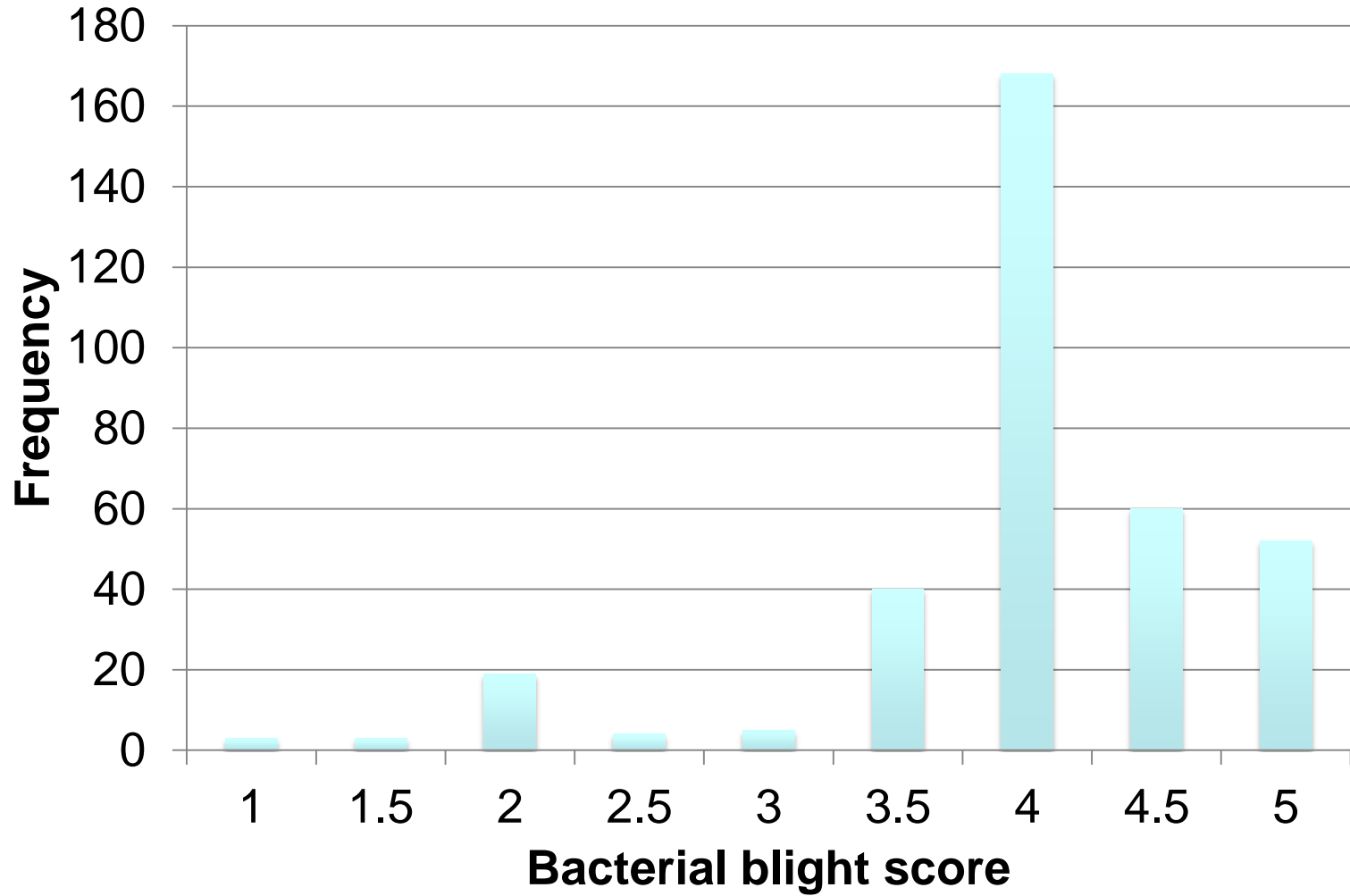
PRELIMINARY EVALUATION OF IITA COLLECTION

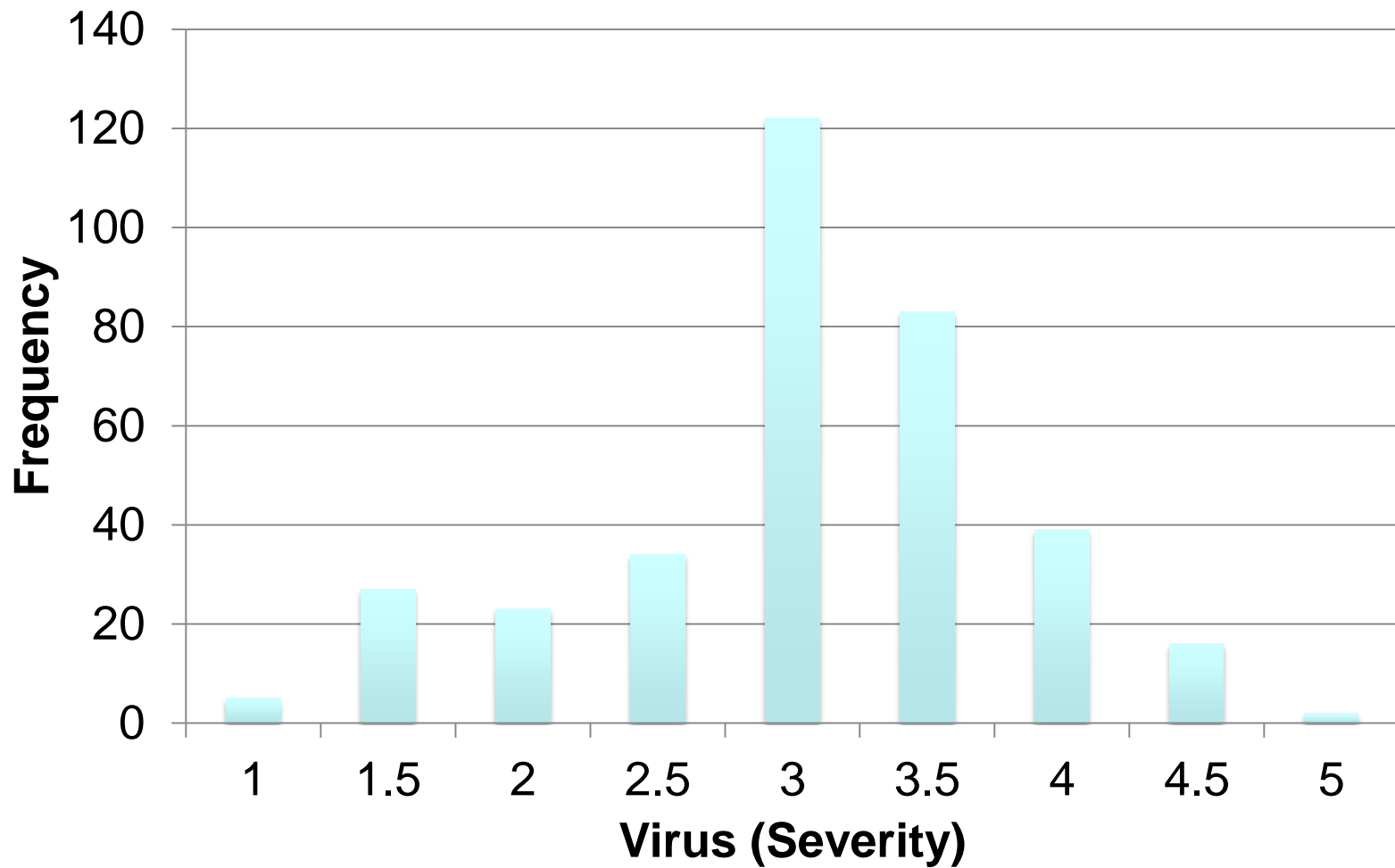
- About 400 bambara groundnut accessions
- Field evaluation at Minjibir, IITA Kano station
- Ridges spaced 75 cm apart
- Single row of 2 m
- Intra-row spacing was about 20 cm
- Three weeding and 2 insecticide spraying applied

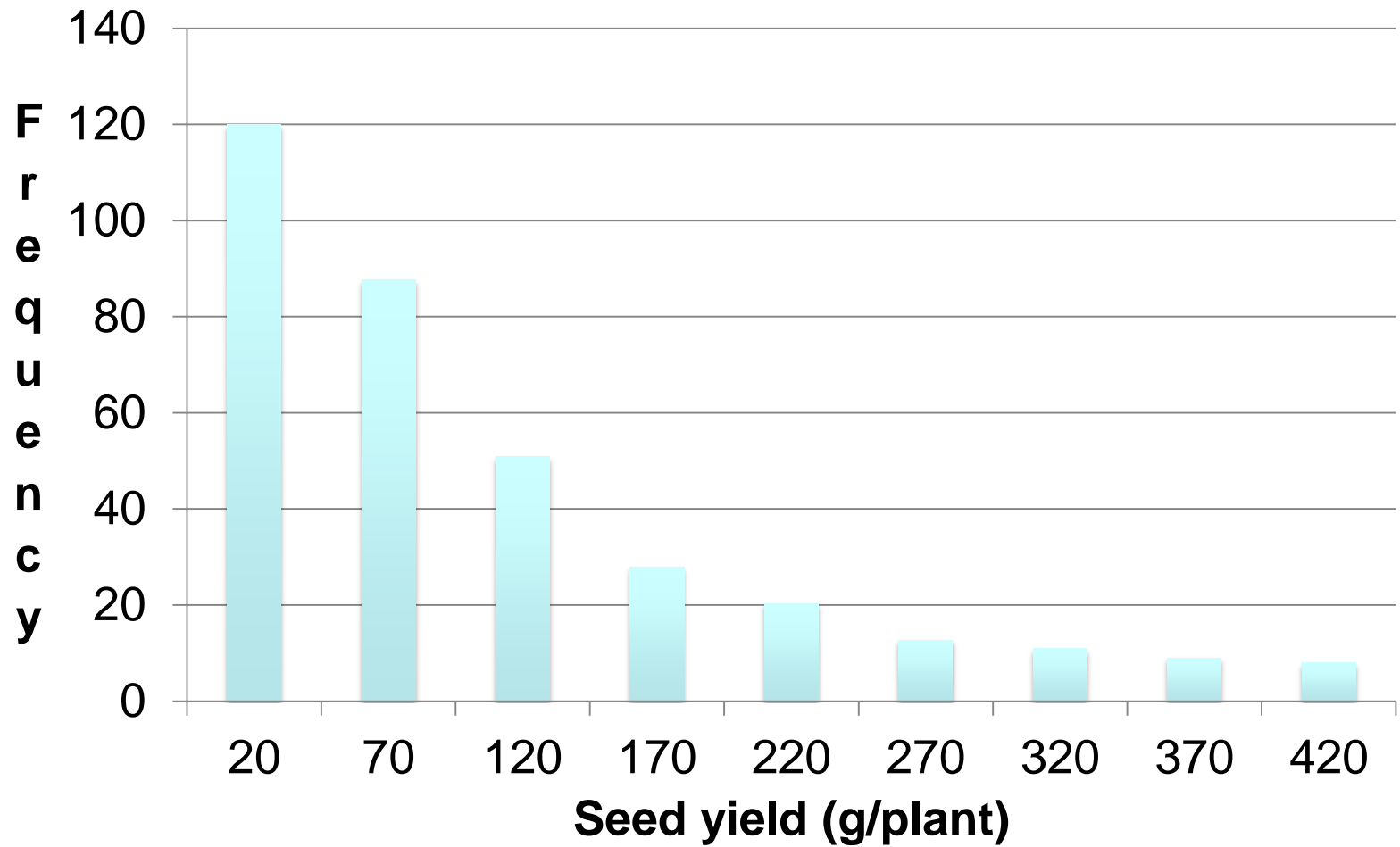
SOME RESULTS







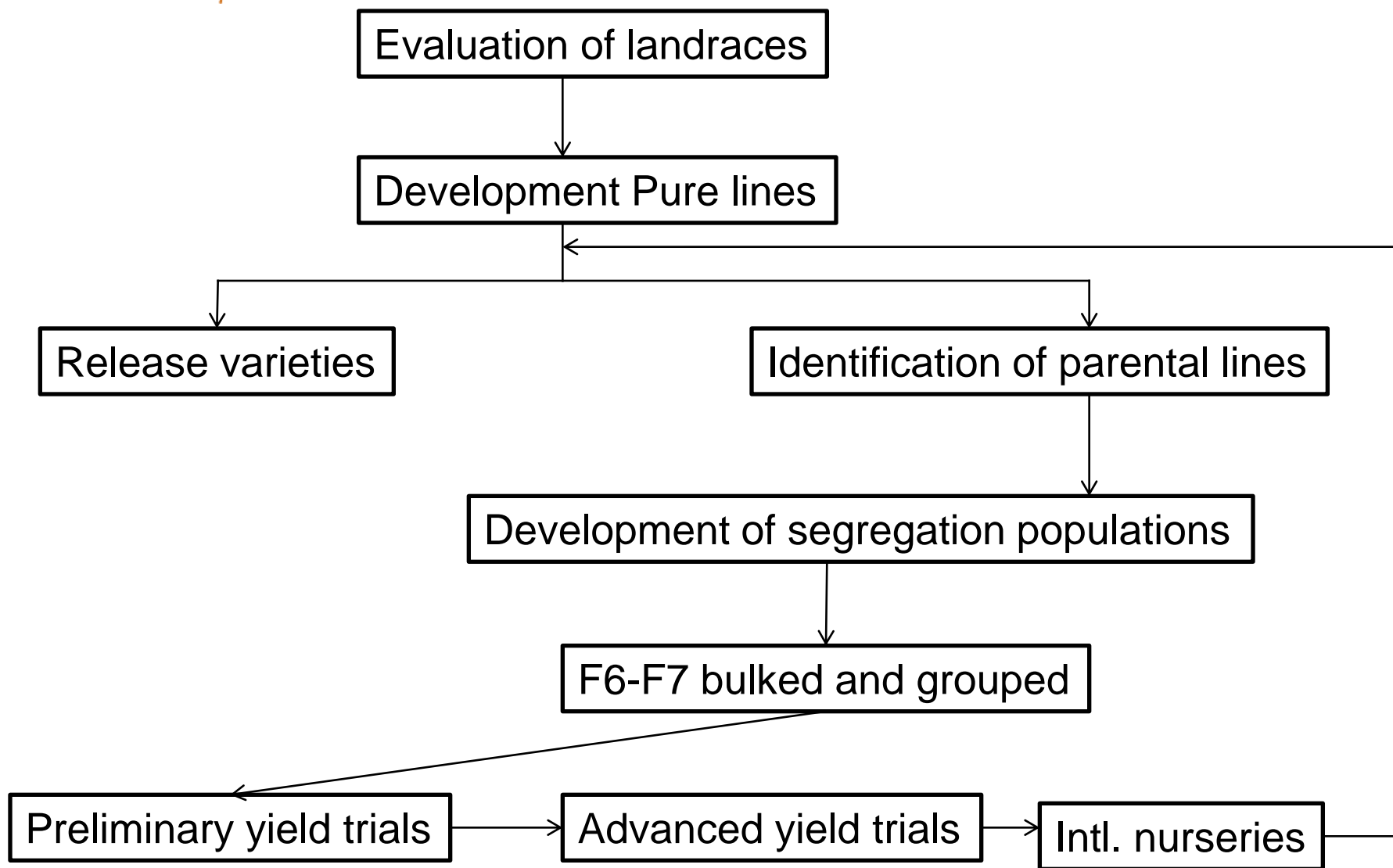




Preliminary conclusion

- Agromorphological diversity of Bambara groundnut
- Challenges for biotic stresses
- Opportunities for yield increase
- Genetic improvement of Bambara groundnut

FUTURE PROSPECTS



Thank you for your attention

and

sincere gratitude

to CFFRC for sponsoring our trip