

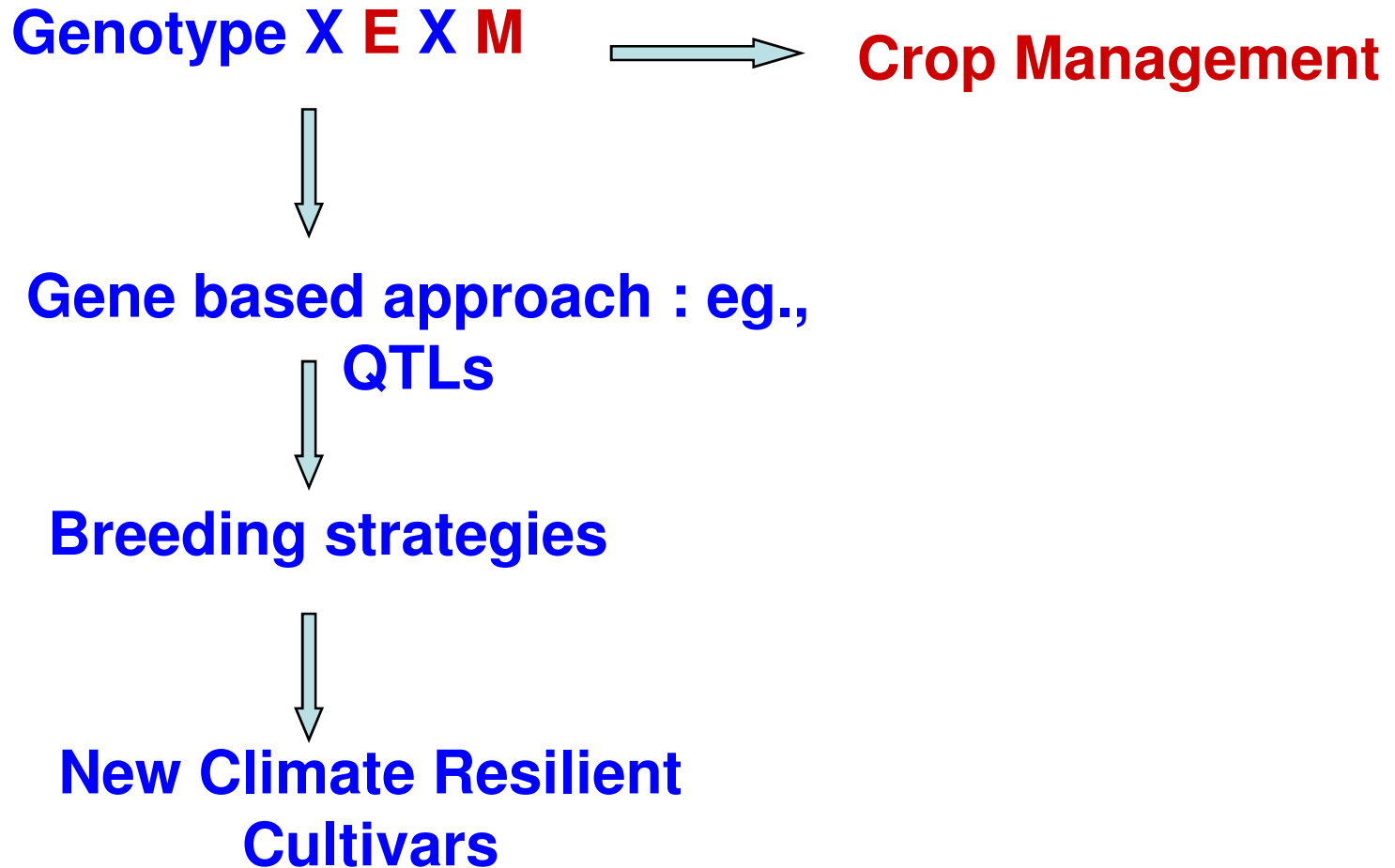
Root Phenotyping for Field Management of crops- dryland crops

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Plant Phenotyping- Agronomic Perspective



Plant Phenotyping

- **Above ground plant phenotyping**
- **Below ground plant phenotyping
(Root Phenotyping)**

Root Morphology:

**Root Architecture: Spatial and Temporal
configuration of Root system**

Root Topology

Root Phenotyping- Agronomic Perspective

Factors

- Genotype
- Plant population
- Tillage
- Soil depth
- Drought & Excess
- Abiotic stress management Measure
- Special operations
- Fertilisers

Drought management measures

Root Phenotyping

Drought management measure:

Conservation furrow

Recommended

Practice : One conservation furrow for
every three rows of crop plants

Field Expt- Greengram- ML267 vs WGG37

Stage 1 (42 DAS)

ML267 –No CF



ML267 – CF

Stage 2 (63 DAS)

WGG37 -No CF



WGG37 - CF

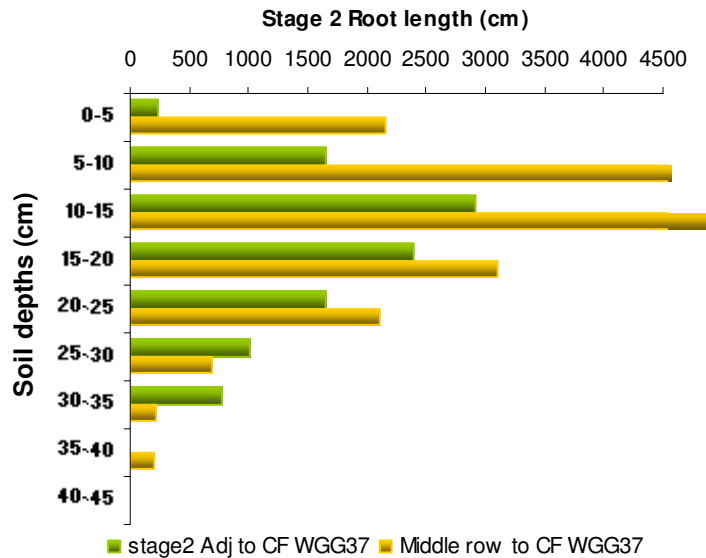
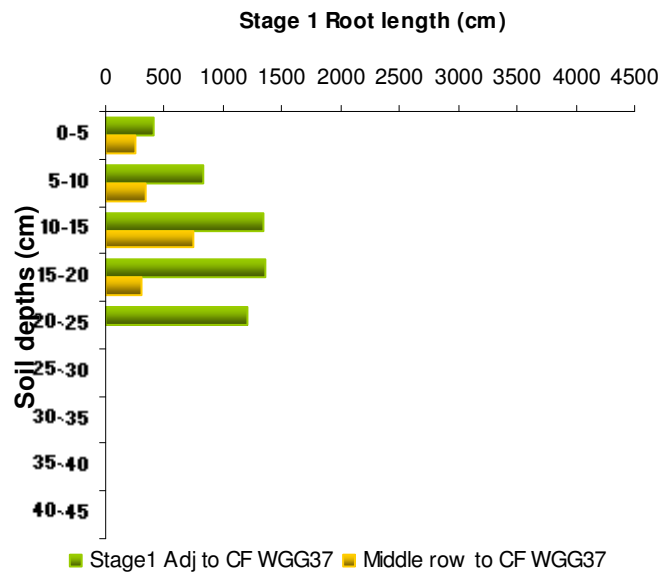
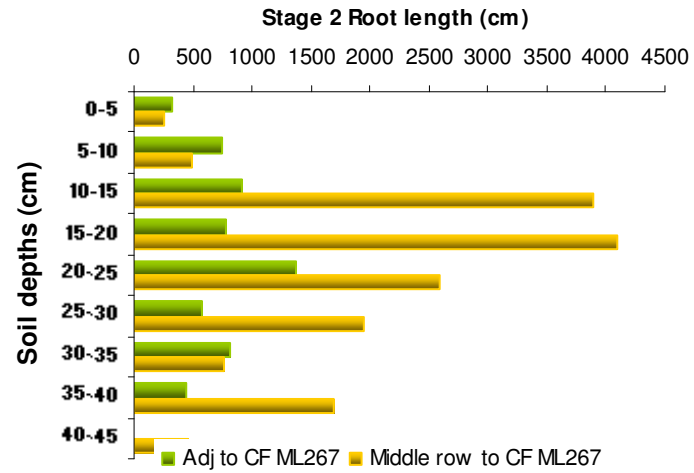
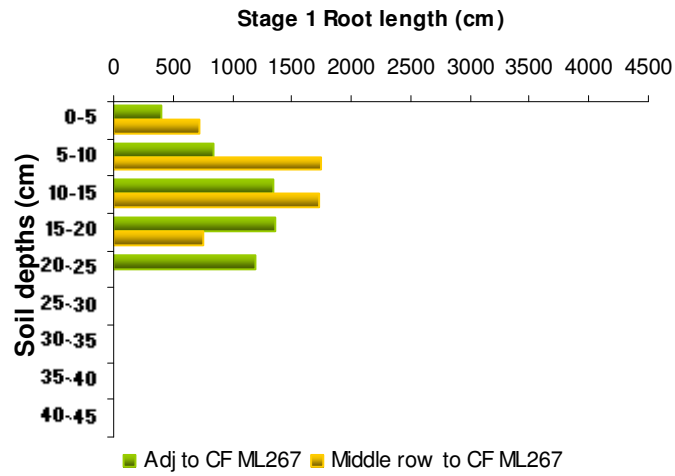


Figure . Rooting depth (cm) and root length (cm) at respective soil depths of adjacent and middle rows of mungbean of Conservation Furrow treatment (2011)

Root Phenotyping- Agronomic Perspective

Drought management measure:

Conservation furrow

Recommended

Practice : One conservation furrow for
every three rows of crop plants

Refined practice: One CF for every two rows of crop
plants (Greengram – 30 X 15cm)