Unsubtracted Control (UC)

CONTROL Cowpea

Unsubtracted Treated (UT)

DROUGHT STRESSED Cowpea

Suppression Subtractive Hybridization (SSH)

Drought responsive cDNA fragments

Cloned into pGEM–T Easy

Subtracted Treated (ST) = forward library

Subtracted Control (SC) = reverse library

Spotted cDNA microarray slide

SSHscreen Software

• Normalization
• Replicate handling
• Calculate ratios
• Statistical tests

Ranked gene lists (Top tables)

Select genes from F and R library Top tables

Sequence selected genes

SSHdb

• Vector clipping
• Redundant partners
• Blast2GO
• BLASTX/BLASTN

Verify microarray results with qPCR

Design qPCR primers from sequences

cDNA from:
• UT sample
• UC sample
• ST sample
• SC sample

Label
Hybridize