**References to be incorporated**


FIG. 4.1. LIBRARY PROFILE OF WELL-WATERED CONTROL SAMPLE (SAMPLE-A) ON AGILENT DNA HS CHIP
FIG. 4.2. LIBRARY PROFILE OF DROUGHT STRESSED SAMPLE (SAMPLE-B) ON AGILENT DNA HS CHIP
FIG. 4.3. VOLCANO PLOT OF SIGNIFICANTLY EXPRESSED GENES (RED DOT) IN WELL-WATERED CONTROL SAMPLE (SAMPLE-A) AND DROUGHT STRESSED SAMPLE (SAMPLE-B)
FIG. 4.4. A HEAT MAP 100 DIFFERENTIALLY EXPRESSED GENES (TOP 50 UP-REGULATED AND TOP 50 DOWN-REGULATED) BETWEEN WELL-WATERED CONTROL SAMPLE (SAMPLE-A) AND DROUGHT STRESSED SAMPLE (SAMPLE-B)
(i) RAB16B gene (FPKM for A: 11.4; FPKM for B: 324.15; Log 2 fold change: 4.83)

(ii) BGIOSGA004288 (FPKM for A: 3.61; FPKM for B: 36.59; Log 2 fold change: 3.34)

(iii) BGIOSGA021996 (FPKM for A: 16.35; FPKM for B: 131.05; Log 2 fold change: 3)

(iv) BGIOSGA031512 (FPKM for A: 2066.56; FPKM for B: 10358; Log 2 fold change: 2.33)

(v) BGIOSGA006844 (FPKM for A: 10.22; FPKM for B: 50.22; Log 2 fold change: 2.3)

(i) BGIOSGA034434 (FPKM for A: 138.91; FPKM for B: 633.68; Log 2 fold change: 2.19)

(ii) BGIOSGA023791 (FPKM for A: 15.39; FPKM for B: 59.03; Log 2 fold change: 1.94)

(iv) RPL23-A (FPKM for A: 2674.14; FPKM for B: 10103.2; Log 2 fold change: 1.92)

(iv) BGIOSGA011848 (FPKM for A: 13.29; FPKM for B: 49.97; Log 2 fold change: 1.91)
(i) BGIOSGA000826 (FPKM for A: 234.66; FPKM for B: 11.92; Log 2 fold change: -4.3)

(ii) GLO1 (FPKM for A: 224.32; FPKM for B: 14.37; Log 2 fold change: -3.96)

(iii) BGIOSGA016467 (FPKM for A: 226.57; FPKM for B: 3.46; Log 2 fold change: -2.94)

(iv) BGIOSGA019432 (FPKM for A: 137.83; FPKM for B: 12.27; Log 2 fold change: -3.49)

(v) BGIOSGA021080 (FPKM for A: 54.72; FPKM for B: 8.24; Log 2 fold change: -2.73)

(vi) BGIOSGA021426 (FPKM for A: 47.2; FPKM for B: 7.87; Log 2 fold change: -2.58)
(i) BGIOSGA034046 (FPKM for A: 59.94; FPKM for B: 13.41; Log 2 fold change: -2.16)

(ii) BGIOSGA012921 (FPKM for A: 147.74; FPKM for B: 34.03; Log 2 fold change: -2.12)

(iii) BGIOSGA013470 (FPKM for A: 66.61; FPKM for B: 18.68; Log 2 fold change: -1.82)

(iv) BGIOSGA004633 (FPKM for A: 1238.74; FPKM for B: 415.46; Log2 fold change: -1.58)
(v) BGIOSGA035968 (FPKM for A: 331.54; FPKM for B: 131.49; Log 2 fold change: -1.33)

FIG. 4.6(B). EXPRESSION LEVEL (FPKM) OF SOME OF THE IMPORTANT DOWN-REGULATED TRANSCRIPTS/GENES GENERATED BY “CUMMERBUND” (R-PACKAGE). A: CONTROL AND B: DROUGHT STRESSED
FIG. 4.6. GENE ONTOLOGY (GO) CLASSIFICATIONS OF DEGS UNDER BIOLOGICAL PROCESS CATEGORY
FIG. 4.7. GENE ONTOLOGY (GO) TREemap UNDER BIOLOGICAL PROCESS CATEGORY
FIG. 4.6. GENE ONTOLOGY (GO) CLASSIFICATIONS OF DEGS UNDER BIOLOGICAL PROCESS CATEGORY

FIG. 4.7. GENE ONTOLOGY (GO) TREEMAP UNDER BIOLOGICAL PROCESS CATEGORY
FIG. 4.8. GENE ONTOLOGY (GO) CLASSIFICATIONS OF DEGS UNDER CELLULAR COMPONENT CATEGORY
FIG. 4.9. GENE ONTOLOGY (GO) TREEMAP UNDER CELLULAR COMPONENT CATEGORY
FIG. 4.10. GENE ONTOLOGY (GO) CLASSIFICATION OF DEGs UNDER MOLECULAR FUNCTION CATEGORY

FIG. 4.11. GENE ONTOLOGY (GO) TREEMAP UNDER MOLECULAR FUNCTION CATEGORY
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FIG. 3.1. METEOROLOGICAL DATA DURING THE CROP SEASON, 2012
FIG. 3.1. METEOROLOGICAL DATA DURING THE CROP SEASON, 2013
Plate 3.1 Seedlings of Banglami variety of rice: (a) Grown under well watered control condition and (b) Grown under drought stressed condition

Plate 3.2 Seedlings of Luit variety of rice: (a) Grown under well watered control condition and (b) Grown under drought stressed condition
Plate 3.4 Root of Banglami variety of rice at seedling stage (a) Grown under well watered control condition and (b) Grown under drought stressed condition

Plate 3.5 Root of Luit variety of rice at seedling stage (a) Grown under well watered control condition and (b) Grown under drought stressed condition