

Instructions for Preparing Abstracts

- Deadline: **February 28, 2009.**
- Only electronic submissions in MSWord will be accepted for review. Please submit your abstract at email id: camb1@wol.net.pk;
- Presenting authors are limited to submitting one (1) Abstract, but can be co-authors of multiple papers.
- Please provide corresponding author contact information.

Detailed Instructions for Submitting Abstracts

- Type your abstract using Times New Roman font size 12 as per the Sample Abstract given below.
- Abstracts (not counting author name(s), affiliation, etc.) are limited to 250 words and may be truncated at the time of production if they exceed that length.

Confirmation of Acceptance

By **March 05, 2009.**

Agreement

In submitting an abstract you certify that the paper is an original contribution and give permission to the Symposium organizers to publish it on the Symposium website and in the CD-ROM/Book of Abstracts.

Typing Instructions for Preparing Abstracts

Abstracts should be submitted as per the given format. Please use only **MSWord** word-processor. The entire text of the abstract must not exceed 250 words, excluding name(s) of authors, address, etc.

- Use the following samples format for preparing your abstract: Title Line, Author Line, Address, (Blank Space), Text.

SAMPLE

ISOLATION AND CHARACTERIZATION OF DROUGHT RELATED GENES FROM GOSSYPIUM ARBOREUM L.

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Five local varieties of *Gossypium arboreum* i.e. FDH-170, FDH-300, FDH-306, FDH-786 and Ravi were studied for tolerance against water shortages. Epicuticular wax and proline content from leaves of control and drought stressed plants were extracted and quantified. All varieties showed an increase in the wax and proline content under drought conditions and FDH-786 was found to be the most drought tolerant with a 9 fold high level in wax content and 5.75 fold elevated level of proline content as compared to control. So it was selected for the identification and expression analysis of wax genes. Primers were designed from genbank EST database to identify unknown wax genes from *Gossypium arboreum*. Full-length coding region of two of these genes was identified by RACE-PCR and sequenced. These genes showed homology with wax gene 3-ketoacyl CoA synthase and Cer3 gene of *Arabidopsis thaliana*.

Gossypium arboreum (L) was also studied using differential display technique. Initially 45 fragments were expressed with 93 primer pair combinations and 25 fragments were isolated, cloned, and sequenced. Seven were confirmed through real time PCR. Small alpha-crystalline heat shock proteins gene (GHSP26) was isolated and characterized using RACE and genomic DNA PCR. Segments of 1108 bp genomic and 1026 bp cDNA sequences were obtained. Alignments revealed that GHSP26 comprises a single open reading frame of 230 amino acids. Expression of the gene in different tissues was checked through Real time PCR. The results indicated that the gene is mainly expressed in leaves of treated plants.

Key words: *Gossypium arboreum*, drought stress, Epicuticular wax, heat shock protein gene