



## **COST Action FA0605**

*“Signalling control of stress tolerance and  
production of stress protective compounds in plants “  
International Network of Plant Abiotic Stress” (INPAS)*

<http://www.cost.esf.org/index.php?id=181&action number=FA0605>

<http://cost-inpas.org/>.

## **TENTATIVE TITLES FOR PROPOSED SPECIAL ISSUE**

### **Signalling**

1. John Doonan et al.

CDK function in responding to stress. (Review)

2. Pedro Rodríguez et al

Structural insights into abscisic acid receptors. (Review)

3. Tapio Palva et al.

ERD15 - a central regulator of abiotic and biotic stress responses and stomatal closure.  
(Review)

### **Transcriptional and post-transcriptional control**

4. Julio Salinas et al.

The CBFs: three transcription factors to cold acclimate. (Review)

5. Stefania Grillo et al.

RNA binding proteins in plant stress response and development. (Review)

6. Sergio Mauro et al.

Graded regulation of cellular metabolism by protein SUMOylation. (Review)

7. Laszlo Szabados\*, Alain Bouchereau\* and Arnould Savouré\* et al.

Comparative transcriptome analysis of Arabidopsis and Thellungiella species. (Article)

\* (*Collaboration between 3 groups of COST-Action FA0605*)

8. Joachim Kopka et al.

Modification of OsSUT1 expression modulates the salt response of rice (*Oryza sativa*  
cv. Taipei 309). (Article)

## **Stress responsive mechanisms**

### ***Proteins***

9. Narendra Tuteja et al.

Chaperones and foldases in endoplasmic reticulum stress signalling in plants. (Review)

10. Laszlo Szabados et al.

Small heat shock proteins control stress tolerance and ABA responses. (Article)

11. Moez Hanin et al:

Unravelling the role of dehydrins in the tolerance mechanisms of plants to abiotic stress. (Article)

12. Ismail Turkan et al.

Regulation of ROS formation and antioxidant enzymes in leaves of *Cleome spinosa* (C3) and *C. gynandra* (C4). (Article)

### ***Metabolites***

13. Arie Altman\* and Aviah Zilberstein\*

"Metabolomics of plant abiotic stress tolerance: Achievements and prospects. (Review)  
\* (*Collaboration between 2 groups of COST-Action FA0605*)

14. Gad Galili et al.

Regulation of plant amino acid metabolism in response to abiotic stresses: A bioinformatics insight. (Review)

15. Virgilija Gaveliene et al.

Proline and carbohydrate changes during cold acclimation of different winter rape (*Brassica napus* L.) varieties. (Article)

16. Tihana Teklic et al.

The relations of proline content and metabolism on the productivity of maize plants. (Article)

17. Rubén Alcázar\*, Dorothea Bartels\*, Csaba Koncz\*, A.F. Tiburcio\* et al.

Polyamine metabolic fluxes in response to drought in *Arabidopsis* and resurrection plants. (Article). \* (*Collaboration between 4 groups of COST-Action FA0605*)

18. Tomonobu Kusano et al.

Two tetraamines, thermospermine and spermine, act as signalling molecules in plants but differ in their function. (Article)

19. Oscar A. Ruiz\*, Pedro Carrasco\*, AF Tiburcio\* et al.

New insights into the role of polyamines in *Arabidopsis thaliana* under long-term salt stress. (Article). \* (*Collaboration between 3 groups of COST-Action FA0605*)

20. Milena Cvikrová et al.

Effect of heat stress on polyamine metabolism in transgenic tobacco with increased proline level. (Article)

21. Rina Rina Iannacone\*, A.F. Tiburcio\* et al.

Effect of Arabidopsis ADC1 and ADC2 overexpression in plant response to different abiotic stresses. (Article). \*(*Collaboration between 2 groups of COST-Action FA0605*)

22. Riccardo Angelini et al.

Reduction of nicotine in tobacco upon copper amine oxidase inhibition. (Article)

23. Jaume Bastida\*, A.F. Tiburcio\* et al.

Changes in phenylpropanoid profiling in tobacco plants during senescence and drought conditions determined by high-performance liquid chromatography coupled to electrospray ionization tandem mass spectroscopy. (Article)

\*(*Collaboration between 2 groups of COST-Action FA0605*)

## **Stress physiology**

24. Dimitar Djilianov\* and Dorothea Bartels\*

Photosynthesis in desiccation tolerant plants: energy metabolism and antioxidative stress. (Review) \*(*Collaboration between 2 groups of COST-Action FA0605*)

25. Oscar A. Ruiz\*, Pedro Carrasco\* et al.

The genus Lotus: importance in the study of stress physiology and biotechnological applications. (Review) \*(*Collaboration between 2 groups of COST-Action FA0605*)

26. Asim Kadioglu et al.

Current advances in leaf rolling as an indicator of water status in some plants. (Review)

27. Jonathan R. Phillips

Stabilizing maize yield under drought stress. (Review)

28. Vasileios Fotopoulos et al.

Friend or foe: the role of oxidative and nitrosative stress under varied environmental conditions. (Review)

29. Hannes Kollist et al.

A new method for finding Arabidopsis mutants affected in transpiration. (Article)

30. Izabela Marcinska et al.

Changes of physiological and biochemical characters in leaf of drought sensitive or resistant wheat genotypes under osmotic stress. (Article)

31. Narendra Tuteja et al.

Cadmium stress negatively affects growth and nitrogen metabolism and upregulates sulfur assimilation and antioxidant machinery in garden cress (*Lepidium sativum* L.) - a medicinal hyperaccumulator. (Article)

32. Kumud Mishra\*, Rina Iannacone\* et al.

Chlorophyll fluorescence imaging reporting drought tolerance in tomato transgenics .  
(Article). \*(*Collaboration between 2 groups of COST-Action FA0605*)

33. Kumud Mishra\*, Arnd Heyer\* et al.

Chlorophyll fluorescence based technique for screening cold tolerance in *Arabidopsis thaliana* accessions. (Article). \*(*Collaboration between 2 groups of COST-Action FA0605*)