

**Twentieth International Grassland Congress:  
Satellite Workshop- Fourth International Symposium on the  
Molecular Breeding of Forage and Turf  
July 2005, Aberystwyth, UK.**

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The 20<sup>th</sup> International Grassland Congress was held in Dublin, Ireland in the summer of 2005. A number of presentations representing the genus *Lotus* were included in that meeting and are described elsewhere in this volume. The focus of the work presented in Dublin focused on the advantages (and disadvantages) of *Lotus* spp. in an agricultural context. By contrast, the papers presented in the satellite workshop at Aberystwyth related to the use of *Lotus* to answer more fundamental questions related to plant biology. The three most relevant papers are described below and also cross-reference to some of the papers at the main congress.

*L. japonicus* research work in Japan and accompanying genetic resources was outlined in the following presentation:

**Structural and functional genomic research in model legume plants: The National Bioresource Project (NBRP) in Japan.**

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Additionally, two presentations were made regarding the molecular regulation of condensed tannin biosynthesis in *Lotus*, together with one paper at the main meeting:

**Identification of putative *At* TT2 R2R3-MYB transcription factor orthologues in tanniferous tissues of *L. corniculatus* var. *japonicus* cv *Gifu*.**

D.N. BRYANT<sup>1</sup>, P. BAILEY<sup>2</sup>, P. MORRIS<sup>1</sup>, [M. ROBBINS](#)<sup>2</sup>, C. MARTIN<sup>2</sup> and [T. WANG](#)<sup>2</sup>

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**Polyphenolic phenomena: transgenic analysis of some of the factors that regulate the cell-specific accumulation of condensed tannins (proanthocyanidins) in forage crops**

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**Light intensity is positively correlated with the synthesis of condensed tannins in *Lotus corniculatus***

S. ARCIONI, T. BOVONE, [F. DAMIANI](#) and F. PAOLOCCI

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Main Congress offered paper 244

Also of particular interest in the main congress were three papers quantifying the levels of condensed tannins in *Lotus* spp. Methodologies ranged from very simple methodologies to highly sophisticated and reproducible methods in micro-titre plates suitable for high-throughput applications.

**Variation in tannin content and morphological traits in *Lotus corniculatus* L. (bird's-foot trefoil)**

[A.H. MARSHALL](#), F. RIBAIMONT, R.P. COLLINS, D. BRYANT and M.T. ABBERTON

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Main Congress offered paper 245

**Condensed tannins in different varieties of *Lotus corniculatus***

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Main Congress offered paper 246

**Herbage production, nitrogen fixation and condensed tannin concentrations in *Lotus glaber* Mili, germplasm**

[H. ACUÑA](#), M. FIGUEROA, P. HELLMAN and A. CONCHA

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Main Congress offered paper 247

It is clear from the above that the biological variation contained in *Lotus* spp. is a potentially valuable resource for the biological sciences community. The members of this genus and their genetic variation complement resources found for one of the legume models used for

functional genomic studies ie. *Lotus japonicus* (Kawaguchi *et al.*, 2001; Udvardi *et al.*, 2005)

KAWAGUCHI M., MOTOMURA T., IMAIZUMI-ANRAKU H., AKAO S. and KAWASAKI S. 2001. Providing the basis for genomics in *Lotus japonicus*: the accessions Miyakojima and Gifu are appropriate crossing partners for genetic analyses. *Molecular Genetics and Genomics*, **266**, 157-166.

UDVARDI M.K., TABATA S., PARNISKE M. and STOUGAARD J. 2005. *Lotus japonicus*: legume research in the fast lane. *Trends in Plant Science*, **10**, 222-228.