



## INTRODUCTION



## The 4<sup>th</sup> International Workshop on Desiccation Tolerance and Sensitivity of Seeds and Vegetative Plant Tissues

The 'Desiccation Workshops', as they have become known, were initiated in response to a need to provide a forum for those interested in the phenomenon of desiccation tolerance. This topic tends to get buried in larger meetings on seed biology and general plant physiology, and the workshops provide the opportunity for both seed and plant physiologists to discuss their common interest in desiccation – and response to it.

The first of these meetings was held in 1994 at the Kruger National Park in South Africa, and they have been held in various 'retreats' in South Africa every 3 or 4 years since then. The organizers have deliberately chosen venues away from the distractions of the bright city lights to encourage informal interactions among delegates – a policy that has been remarkably successful. The 4<sup>th</sup> of these workshops, the first held under the auspices of the International Society for Seed Science, took place at Blouwaterbaai, part of Saldanha Bay, on the arid west Cape coast. On this occasion the meeting was held in the southern hemisphere winter, to take advantage of the blooming of the famous winter flowers. While the organizers are prepared to accept responsibility for most operational aspects of the meeting, they do draw the line at being blamed for the weather – southern Africa has been going through a serious drought and the winter rains stayed away, until the delegates arrived! Consequently, during the meeting flowers were in short supply, but cold, driving rain was not. Despite the inclement weather (one delegate was observed swaddled in a blanket and another was heard to describe the region as 'pseudo-Africa'), a successful meeting was held, and a general vote requested that the next workshop also be held in South Africa.

Some interesting changes have been observed in the 'hot topics' covered by the meetings. The topics covered at the workshops range from ecological in nature, through physiology to molecular biology and

biophysics. At the 4<sup>th</sup> Workshop there was a noticeable increase in interest in ecological and evolutionary aspects, particularly of recalcitrant seeds. Perhaps the most noticeable change, however, has been the growth in the number of presentations on desiccation tolerance in vegetative tissues, both angiosperm and lower orders, and it appears that one of the original intentions in starting these workshops – to bring seed biologists and plant physiologists together to discuss a common interest – has been achieved. A slightly worrying aspect is that there has not been a similar increase in the number of delegates working on the phenomenon of desiccation tolerance and sensitivity in seeds. Are we not attracting young scientists into the field; is this an aspect that we should be concerned about?

The papers from the Workshop that comprise this special issue are a selection of those that focus on seed desiccation tolerance. All of the published papers have been peer-reviewed and rigorously edited. Papers concentrating more on vegetative tissue will appear as a group in *Physiologia Plantarum*.

Scientific meetings cannot be held without the input of a few dedicated people, and as always, our students have carried the brunt of the work. Special thanks to Prinisha Badassy, Sershen Naidoo and Gundula von Fintel. Thanks also to the International Society for Seed Science for generously providing student travel grants.

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