



SenWiki

An interactive online resource for researchers on plant senescence

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What is SenWiki?

SenWiki is an interactive website currently under construction by Suzy Shipman and Sid Thomas. Initially it will bring together a large collection of text and images on the general subject of senescence based on research carried out at Aberystwyth and elsewhere over several decades. This will be the foundation of a wide-ranging information resource for, and contributed by, the international senescence community.

Why senescence?

Search for *plant senescence* in Google Scholar and you'll get back 60000 results. It would be useful to pull this large body of knowledge together into an accessible and updatable structure. This becomes more important as senescence is realised to be at the centre of environmental and agricultural responses to the political and economic challenges of the age – climate change, food supply, renewable materials and energy. SenWiki seeks to be an archive of, and portal to, the spectrum of published senescence and related research.

Why wiki?

A wiki is a website the reader can update, comment on and interact with. Wikis are important elements in the so-called *Web 2.0* model - see http://en.wikipedia.org/wiki/Web_2.

A wiki is an online forum where differences of opinion and interpretation can be aired and debated. This is timely in the field of senescence where there are sharply contrasting views – see, for example, H Thomas et al. (2003) *J Exp Bot* 54:1127-1132; WG van Doorn, E Woltering (2004) *J Exp Bot* 55:2147-2153.

What is senescence?

Here are just a few of the many facets of plant growth, development and adaptation in which senescence plays an essential part.



Floral development, function, ageing



Development of structural and vascular tissue



Responses to biotic and abiotic stresses



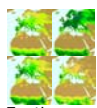
Making holes



Ripening



Lifespan



Earth seen from space

How is SenWiki organised?

At present SenWiki is structured in 13 sections, each of which is anticipated to comprise up to 40 individual pages.

1 What senescence is and isn't

Origin of the word/ Other words with similar meanings to senescence/ Lifespan/ Viability, dying and death/ The specialised meanings of senescence in plant science

2 Senescence-like processes across the plant, animal and microbial kingdoms

Cell growth and viability/ Cell movement and localised senescence/ Senescence in the life cycle/ Senescence in response to abiotic stress/ Senescence and biotic interactions

3 Senescence of vegetative plant organs and tissues

Asex/Laterals

4 Senescence of reproductive plant organs and tissues

Floral parts/ Gametes/ Embryos/ Fruits and seeds/ Senescence of plant cells and organelles/ Cell types/ Organelles

6 Biochemistry of plant senescence

Pigment metabolism/ Macromolecule breakdown and salvage of nutrients/ Energy and oxidative metabolism

7 Molecular regulation of senescence

Natural genetic variation in senescence/ Mutations/ Genetic mapping of senescence traits/ Senescence-associated genes/ Molecular genetics and genomics of senescence/ Genetic programming of senescence/ Hormonal and other chemical regulators of senescence/ Modification of senescence

8 Senescence in relation to other terminal processes

Hypersensitive response/ Programmed cell death/ Seed germination/ Reproduction/ Fruit ripening/ Acheurology

9 Senescence and plant ecology

Adaptation/ Life forms/ Life cycle/ Fitness/ Turnover of individuals, populations, communities, biomes/ Senescence in plant evolution

10 Senescence and agriculture

Senescence characteristics of crops/ Agronomy and management/ Senescence and yield/ Post harvest biology/ Inputs and environmental impacts

11 Senescence, culture and society

Evolution of primate visual system/ Plants, colour and language/ Psychological and pathological relationships between people and plants/ Senescence as a trope for the human condition/ The "Green Movement"

12 Notes

13 Jargon Buster

What next?

We have started populating the pages of SenWiki with content, initially based on a series of reviews of various aspects of senescence published by Sid Thomas and colleagues over the past decade or so. We invite the senescence community to join with this effort, providing content, comment, editorial input and feedback on improving the wiki's usefulness. Contact details below.

How can I make contact and contribute?

Please contact Sid or Suzy by email: hot@aber.ac.uk; sfs@aber.ac.uk. SenWiki's URL is <http://www.sidthomas.net/SenWiki/tiki-index.php>

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