Special Issue

Seed Development, Dormancy and Germination

Message from the Guest Editor

Seeds play a major role in ecosystems and agriculture as plant propagation units and products for human food and animal and insect feed. Seed propagation is determined by the seed potential to germinate and produce viable and robust seedlings. Thus uniformity and rate of germination are important traits in agriculture, especially in crops that are sown directly in the field. The molecular mechanisms modulating germination traits are complex, integrating information (i) from the mother plant during development and stored in the seed maternal tissues, in their structure, composition and biochemistry, (ii) from the surrounding environment and (iii) from the embryo own genetic makeup. The output of this interplay will define the length of primary and secondary dormancy.

Eventually, radicle protrusion will bring germination to its end and seedling establishment will begin. The present issue collects original works related to molecular processes occurring during, and likely mediating, seed development, dormancy and germination with the aim to elucidate the fascinating relation between a seed and its environment; a relation fundamental to life on the planet.

Guest Editor

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Deadline for manuscript submissions

closed (31 December 2018)



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Message from the Editor-in-Chief

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