



## Press Release

### CropDesign Issued Broad US Cell Cycle Patent

#### Patent Covers Important Technology for Plant Growth and Development

GENT, BELGIUM, July 13, 2000 — CropDesign N.V. (CropDesign) announced today that the United States Patent and Trademark Office (USPTO) has issued the company a broad patent in the area of plant cell cycle technology. Cell cycle is the control mechanism that regulates cell division, the fundamental means by which organisms grow and propagate. The patent issued by the USPTO covers the use in plants of the major classes of cell cycle genes and related proteins for control of cell growth and proliferation.

The plant genome comprises several hundred cell cycle genes. CropDesign targets regulation of plant cell cycle genes in order to modulate the size, shape and overall growth of plants, as well as of specific plant tissues such as roots, leaves, grain, etc. Several scientific publications, including a recent paper in the journal *Nature*, have documented significant enhanced growth in plants through regulation of cell cycle genes.<sup>1</sup> CropDesign in-house product development programs target cereals with improved yield, stress tolerance, disease resistance and enhanced quality using cell cycle genes, as well as other genes involved in cell growth and development. These traits have also made cell cycle an important target for seed, crop protection, and other agribusiness companies.

The subject matter of the USPTO patent (US patent no. 6,087,175) was invented by Dr. Pete John at the Australian National University (ANU) in Canberra, Australia. Dr. John conducts on-going research on behalf of CropDesign at the ANU. ANU contributed the technology for which the patent was issued to CropDesign in return for shares upon the founding of the company. CropDesign also collaborates with other leading academic research institutes on the discovery and functional characterisation of cell cycle genes. Approximately 50 academic scientists are now engaged with CropDesign research programs, and together with the company's in-house team, comprise one of the largest research groups in the area of cell cycle.

Dr. Herman Van Mellaert, CropDesign CEO, commented, "we are very pleased that the pioneering work of Dr. Pete John in the area of plant cell cycle has been recognised by the USPTO. His work led to the first patent filing in this research area, with the result that very broad claims have now been issued to us." CropDesign seeks extensive patent protection in the US, Europe and elsewhere of trait-related inventions, as well as of enabling technologies, in the area of plant growth and development. Dr. Van Mellaert added, "cell cycle technology has many applications in

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<sup>1</sup> Cockcroft, C., den Boer, B., Healy, S., Murray, J. Cyclin D control of growth rate in plants, *Nature* **405**, 575-579 (2000).



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the development of improved products for seed companies and others in agribusiness, including identification of potential targets for novel crop protection products.” CropDesign employs cell cycle technology in-house to develop higher yielding and hardier varieties of rice, wheat and other cereals.

CropDesign, based in Gent, Belgium is an agbiotech company focussed on the application of functional genomics for improved crop performance, including higher yield, heightened tolerance to stress and diseases and better quality. CropDesign applies its technology in rice, wheat and other cereals. Founded in 1998, CropDesign employs over 50 people at its research facilities in Gent. Investors in CropDesign include Atlas Venture, GIMV, and Sofinnova.

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