



27<sup>th</sup> March 2015

## **PBL's patent on glucoraphanin-rich broccoli : *Valid***

### **European Patent Office Decision confirms societal value and validity of patents for innovative plant breeding**

The decision of the European Patent Office Enlarged Board of Appeal, 25<sup>th</sup> March 2015 on Case Number G 2/13, is welcome news as it provides much needed clarity on the scope of patent protection in the European Union for plants and plant products. Certain of the claims in PBL's European patent on high-glucoraphanin broccoli (Application Number 99915886.8 / Patent Number EP1069819), produced during the 1990's by Prof Richard Mithen while at the [John Innes Centre](#), have been questioned as to whether they should be excluded from patentability under Article 53(b) of the European Patent Convention. The EBA has now interpreted the scope of the exclusion from patentability under Article 53(b) EPC such that all PBL's patent claims should be allowable. The "broccoli patent" has been seen as something of a test case and this decision represents an important step towards encouraging much needed innovation in agriculture and horticulture in the European Union.

For a patent to be granted, an innovation has to satisfy the test of being a step forward in knowledge and practice; the requirements are assessed for each patent application by each national or region, in the case of Europe, patent office. Inventions which are found to be theoretical or too close to existing ideas or natural processes may not be eligible for patents. In particular, Article 53(b) excludes from patentability "essentially biological processes". Certain aspects of plant breeding are rightly excluded from patentability and adequate protection can be gained under Plant Breeder's Rights (UPOV etc) systems. However other innovations in plant science that overcome such substantial technical challenges as to rightly deserve patent protection have hitherto been left in uncertain territory until the actual interpretation of the patent law has been challenged and, as now, clearly established.

PBL's mission is to protect and bring into public use the innovations generated by public research organisations particularly, though not exclusively, in the plant sciences. PBL therefore regularly files patents on such innovations in plant science. The information about these breakthroughs is made public via the scientific publications of public researchers that created them and also by the publication of the patent applications in the normal course of patent prosecution. PBL then licenses the patented inventions to business partners who bring in the substantial and long-term investment and development capabilities that are inevitably necessary to bring early stage public-research innovations to market.

When farmers, food producers and retailers adopt those innovations for the value they deliver, PBL and its academic and commercial partners each have the opportunity to receive a share of the benefits, enabling more research to be carried out for the generation of new innovations.

Today's demand for innovation in plants and plant breeding is significant, driven by global needs to produce much more with fewer natural resources. Significant innovation is required to develop improved plants and plant products for farmers, consumers and the environment. The patent system offers the inventor protection for their intellectual property, which is however, time-limited to 20 years. When patents expire, many innovations - including new plants - continue to bring value to society for decades to come. Even so, without the protection of patents, there would be less incentive for public and private investment in research and the creation of new methods and products that benefit society, and many innovations from public research would never come into practical use.

At the [Institute of Food Research](#), Professor Mithen has continued his research into the nutritional impact of consuming glucoraphanin-rich broccoli. The broccoli is marketed under the name Beneforte Broccoli and more information is available on our [website](#) and at [www.superbroccoli.info](http://www.superbroccoli.info).

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