

Open Source Seeds

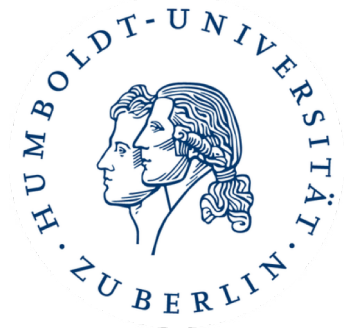
Approaches to IP in Plant Biological Material

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Outline

- I. IP in plants
- II. The Open Source Model
- III. Evaluation





I. IP in plants - Overview

Patents (Art. 52 EPC)

- generic traits (e.g. dark green color)
- incorporating a new, inventive technical teaching
- that can be sufficiently described (e.g. by referring to underlying genetic information)
- Broad protection

Plant variety rights (Art. 5 CPVR)

- specific plant grouping
- with distinct, uniform and stable characteristics
- defined by their genotype
- Limited protection (reproduction and dissemination, cf. copyright law)

- exclusive right to access and use plant germplasm
= *Source Code*



I. IP in plants

= appropriation of innovation in plant biological material

➤ Balancing of interests

Innovation incentive

Reward for the inventor/breeder

Plants are high technology products that are private-copying themselves

Access to significant innovation

Excessive rewards, patent thickets, blocking effects

Plants are natural products (common natural heritage of humankind)



II. The Open Source Model (Software)

- securing free access and use of proprietary software
= *software that may be subject to copyright protection*

- GNU General Public Licence (Stallman, 1989)
 - making available source code
 - allowing for modification and re-distribution
 - in conformity with OS principles („copyleft“)

- generating ‚protected commons‘ and enabling ‚user innovation‘

- *assuring that patents cannot be used to render the programme non-free*



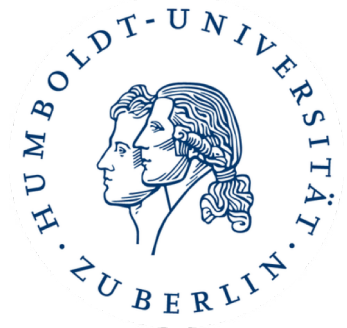
II. The Open Source Model (Seeds)

- securing free access and use of proprietary plant germplasm
= plant germplasm that may be subject to plant variety protection

- GNU GPL for Plant Germplasm (Michaels, 1999)
 - material is being made available under open source conditions
 - connected to the physical sale of seeds (MTA)

- different approaches and initiatives (i.e. Agrecol OSS-License 2017)
Copyleft; „substitute plant variety protection“

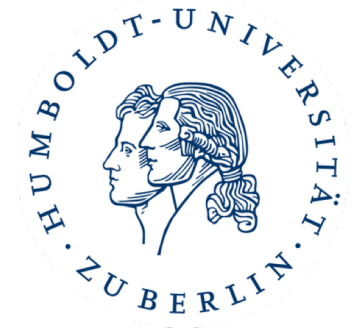
- *hinder patents by allowing for novelty destroying publication*



III. Evaluation

➤ Transferability of OS principles to the distribution of seeds?

<p>(+), both fields of innovation rely on „source code“</p> <p>(+), fairly practical (MTA) and liberal (contract law principles) solution</p> <p>(+), international law requires documentation of origin and breeding processes that might facilitate enforcement of OS licenses</p>	<p>(-), no equivalent ‚user innovation networks‘ in agribusiness</p> <p>(-), high costs of innovation and diffusion (regulatory hurdles!)</p> <p>(-), different proprietary regimes (copyrights./PVR)</p> <p>(-), enforcement less likely with regard to the breeder’s exemption</p>
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Thank you!

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