

2018 植物品種權反侵權國際研討會

2018 International Symposium on Anti-infringement for Plant Breeder's Right

時間：107年3月10日（星期六）

Date：Saturday, 10th March, 2018

地點：臺灣蘭花生物科技園區國際會議廳

Place：Taiwan Orchid Plantation-International Conference Hall, Tainan

時間 Time	題目 Topics	主持人 / 主講人 Host or Speaker
09:00 ~ 09:40	報到 Registration	
09:40 ~ 10:00	開幕典禮及來賓致詞 Opening Ceremony	
10:00 ~ 10:10	團體照 Group photo	
第一節 Session I		
10:10 ~ 10:50	對抗不法行為 - 歐洲蔬菜種苗領域：以「植物材料智財權反侵權局」之經驗為例。 Fighting against illegality in the European vegetable seed sector -AIB's experience	Mr. Casper van Kempen, Managing Director, Anti-Infringement Bureau for Intellectual Property Rights on Plant Material (AIB), Belgium.
10:50 ~ 11:30	臺灣植物新品種之權利保護 Protection of plant variety rights in Taiwan	方怡丹組長 農委會農糧署 Dr. Yi-Tan Fang Director, Crop production division, Agriculture and Food Agency, COA, Taiwan.
11:30 ~ 12:10	臺灣植物品種權侵害救濟實務 Plant variety rights infringements and remedies in Taiwan	陳龍昇副教授 國立中興大學 Dr. Lung-Sheng Chen, Associate Professor, National Chung Hsing University, Taiwan.
12:10 ~ 13:30	午餐 (Lunch)	
第二節 Session II		
13:30 ~ 14:10	育種程序之植物材料選擇，適用何種規則？ - 聚焦國際生物多樣性立法 Selecting plant material for breeding programmes, what rules apply? Focus on international biodiversity legislation	Ms. Anke van den Hurk, Deputy Director, Plantum, the Netherlands.
14:10 ~ 14:50	植物界的「CSI 犯罪現場」 CSI in the world of plants	Dr. Hedwich Teunissen Senior Scientist, Laboratory, Naktuinbouw, the Netherlands.
14:50 ~ 15:10	休息 (Coffee Break)	
第三節 Session III		
15:10 ~ 15:50	日本支持植物品種權保護制度之努力 - PVP G-men 之活動介紹 Efforts of support for Plant Variety Protection System in Japan "Introduction of PVP G-men's activity"	Mr. Tsukasa Kawakami, Head of Plant Variety Protection Section, Center for Seeds and Seedlings, National Agriculture and Food Research Organization, Japan.
15:50 ~ 16:30	綜合討論 Comprehensive Discussion	各節主持人及講者 All Hosts and Speakers

講者簡介 Introduction of speaker

姓名 Name：Casper van Kempen (Dutch)

學歷：荷蘭鹿特丹大學濟經學院碩士

英國雷丁大學農業經濟學院碩士

瑞士洛桑國際管理發展學院碩士



經歷：

曾在瑞士、法國、美國、西非和加勒比地區從事17年的國際事務。

曾於花卉及蔬菜種子公司擔任國際銷售和市場營銷等高級管理職位。首次接觸盜版和仿冒品是在西非 (2003~05)，當時擔任藥品批發公司管理職務。2006年至2010年他統籌每年Fleuroselect (於西歐的花卉育種者組織) 的反盜版運動。2010年至今擔任現職，於布魯塞爾的「植物材料智財權反侵權局」(AIB) 擔任董事總經理，AIB成員包含13個蔬菜種子公司。2016年，AIB在倫敦「國際刑警組織打擊智財權犯罪大會」，因傑出的公私合作夥伴關係於打擊智財權的盜版行為，獲得「IIPCIC獎」表彰其「打擊智財權犯罪傑出貢獻」。

Education

Casper van Kempen obtained Master degrees in Economics at Rotterdam University (NL), in Agricultural Economics at Reading University (UK) and in Business Administration at IMD in Lausanne (Switzerland).

Career

He spent 17 years in international assignments abroad, working in Switzerland, France, USA, West Africa and the Caribbean. Casper held several international senior sales and marketing management positions in flower and vegetable seed companies. He had his first exposure to piracy and counterfeited products when directing a pharmaceutical wholesale company in West Africa (2003-05). From 2006-2010 he co-ordinated the annual anti-piracy campaign in flowers for the Fleuroselect (flower breeders) organisation in Western Europe. In 2010 he took up his present position, starting the Anti-Infringement Bureau for IP Rights on Plant Material in Brussels, with 13 vegetable seed companies as members. At the 2016 Interpol IP Crime Conference in London AIB received the IIPCIC Award for Outstanding Public and Private Partnership in the Fight against Intellectual Property Piracy in recognition of AIB's "outstanding commitment in its fight against intellectual property rights (IPR) crimes".

FIGHTING ILLEGALITY IN THE EUROPEAN VEGETABLE SEED SECTOR - AIB'S EXPERIENCE

Casper van Kempen
(the Anti-Infringement Bureau for IP Rights on Plant Material, Belgium)

Abstract

AIB, the Anti-Infringement Bureau for IP Rights on plant material, is a non-profit association, with 15 leading vegetable seed companies as member, with as mission to prevent and discourage infringements of intellectual property rights in vegetable seeds.

AIB's geographic zone of intervention is worldwide, but in the first 7 years its focus has mainly been at the European Union and the Mediterranean Basin (EU, Turkey, North-Africa).

The vegetable seed industry has a very high research intensity ratio, the annual R&D investment amounts to 20 to 25 percent of net sales. This makes the sector very vulnerable for piracy.

Unfortunately, illegal reproduction of vegetable seeds and plants is rather easy and requires little capital investment. Fighting piracy is made difficult due to the fact that there is no physical distinction between legally and illegally produced harvested products. Moreover, the consumer is not bothered as there are most often no perceived health hazards (in contrast to pharmaceuticals, pesticides or car parts).

The major areas of infringements in vegetable seeds differ for each geographical region.

In Asia, the biggest problem is the theft of parent lines. In Europe and the Mediterranean basin, the vegetative propagation of hybrid crops is large in the main producing areas in Southern Europe. It is estimated that 20 per cent of Spain and Italy's total tomato acreage is now vegetatively propagated, with cherry tomatoes in first place. Also melons, water melons and eggplants are being vegetatively re-produced. A related illegal practice is that of 'stubs', whereby the beheaded cultivar is not discarded after the grafting process, but sold as non-grafted plant (one seed hereby giving two plants, one grafted plant and one non-grafted plant).

Illegal multiplication of seeds of PVR open pollinated varieties is widespread, in particular in crops like lettuce and beans. In Eastern Europe and Central Asia, the F2 production of PVR hybrid onions is very substantial. Other current types of infringements are counterfeit seed packages and variety fraud.

Profits from piracy are high, with low capital investment and, often, at low risk.

The biggest challenge for AIB is to find evidence of infringement, required to take legal steps

('burden of proof'). To prove vegetative propagation or/and selling and using stubs by plant raisers or growers, access to the greenhouse is a pre-requisite to enable comparison of the seed (or young plant) invoices with the number of (young) plants grown or sold. Similarly, to find evidence of illegal seed propagation (or usage of illegally reproduced seeds), where seed is either mislabeled or 'brown bagged' without proper labels, a comparison of seed/young plant invoices with the invoices of the harvested product sold is required. Access to the growers' premises for making unannounced inspections has proven difficult in many countries, as privacy law prevails. Therefore, breeding companies should stipulate this inspection right explicitly in the (signed) sales contracts with growers and plant raisers.

PVR piracy has very often a linkage to other illegalities, like phytosanitary offenses, tax evasion, labor exploitation, fraud and unfair competition. This makes AIB cooperate with a range of technical enforcement agencies, which could be agricultural anti-fraud agencies, tax authorities, phyto-sanitary services, or police, providing technical training to the agents how to recognize illegal reproduction.

When facing vegetative reproduction by their customers, seed companies' sales staff are often confronted with a loyalty issue. It is key that they report any suspicion of irregularity to their management. The seed company's management has to give clear directives to its staff on reporting suspicions of illegality and systematically make piracy suspicion a fixed agenda item at sales meetings and individual performance appraisals.

When fighting PVR piracy in the vegetable chain, evidence of infringement in general cannot be obtained by the right holder himself, as inspections of the growers cannot be legally imposed from the general sales conditions. Therefore public-private sector cooperation has proven to be key for effective enforcement of PVR.

Practice in European countries has demonstrated the need for a specialized PVR Court(s), with trained prosecutors and judges. It is also important to have an accredited laboratory/laboratories to assist the Court in variety identity testing in any civil or penal legal cases.

Time to act against suspected piracy is often short, as growing cycles only take a few weeks. Therefore, it is vital to have suspicions confirmed very quickly by variety identification tests. DNA identity test results should be accepted by the authorities/courts for taking first stage legal action.

A very effective way of controlling IP/PVR fraud are regular inspections by the authorities of any purchase documents (delivery notes, invoices) of seeds, young plants and fresh produce.

Therefore, enforcement of PVR is very much helped by a supporting legal and institutional framework.

The emergence of well-organized pirate companies in the past decade indicate that it is possible to establish profitable business models based on illegal practices.

Background

AIB, the Anti-Infringement Bureau for IP Rights on plant material, started its activities in 2010, created by a consortium of leading vegetable seed companies, to prevent and discourage infringements of intellectual property rights. In this way, AIB tries to ensure an equal playing field for all operators in the vegetable chain.

AIB's geographic zone of intervention is worldwide, but in the first 5 years the focus has been at the European Union and the Mediterranean Basin (EU, Turkey, North-Africa) to address the increasing number of illegality.

AIB has developed close collaboration with national enforcement agencies (police and anti-fraud agencies) as well as with the international police organization Interpol.

In the EU and the neighboring countries AIB is trying to enforce the National Seed Laws and the IP laws, related to Plant Varieties Rights and trademarks of which the most important aspect are :

- National Seed Laws: All varieties have to be registered as precondition for marketing of seed. This means that only those varieties can be sold that have been admitted and published in the national Official Catalogue of Varieties. To be listed in the National Catalogue of Varieties, all new varieties are technically examined, whereby they must meet standards on: Distinctness, Uniformity, and Stability
- National PVR laws are mostly under UPOV Convention 1991 (the international Plant Variety Rights convention). UPOV 1991 does not allow the Farm Saved Seeds (farmers saving seed for their own use or for selling it to others). Therefore, in almost all countries where AIB operates, neither re-production of seed, nor vegetative re-production is allowed of PVR varieties.

Compared to other industries fighting piracy, the vegetable seed sector faces specific challenges :

- Illegal reproduction of seeds and plants is cheap and requires little capital investment
- There is no physical distinction between legally and illegally produced harvested product
- Illegality in vegetable production does not bother the consumer
- Often there are no perceived health hazards (in contrast to pharmaceuticals, pesticides or car parts)
- Vegetable seeds can often move unnoticed across borders, due to its small physical volume.

One additional important hurdle in combatting illegal vegetative propagation is that the customers of the seed companies are very often the culprits. This confronts the seed companies' sales staff with a loyalty issue ("should I denounce my customer (the young plant raiser or grower)?").

The vegetable seed sector has a very high research intensity ratio, estimated between 20 and 25

percent of net turnover, where some companies even report figures of over 30 percent. Breeding companies therefore seek PVR on their varieties to protect their investments. The high research intensity ratio makes the sector at the same time very attractive and also vulnerable for piracy of PVR varieties.

Major areas of infringement in the vegetable chain

The major areas of infringements in vegetable seeds differ for each geographical region.

In Asia, a big problem is the misappropriation of parent lines, which could be qualified in legal terms as trade secret theft. AIB receives numerous reports from breeders signaling that copies of their hybrids are being sold by unauthorized third parties.

In Europe and the Mediterranean basin, the emergence 10 years ago of vegetative propagation of hybrid crops has developed into a very large and expanding activity, particularly in the main producing areas in Southern Europe. The development of grafting tomato plants has spurred a huge increase in vegetative propagation of this crop. It is estimated that around 20 per cent of Spain and Italy's total tomato acreage is now vegetatively propagated, where the percentage of cherry tomatoes is the highest. Also cases of illegal vegetative propagation of melons, water melons and eggplants have been found. Not all vegetative propagation is illegal, of course, so the primary concern is vegetative propagation of protected (PVR) varieties. A related illegal practice is that of 'stubs' whereby the beheaded cultivar is not discarded after the grafting process, but sold as non-grafted plant. In this way, one seed of the cultivar results in two plants, one grafted and one non-grafted.

A major infringement activity found all over the world is the illegal multiplication of seeds of PVR protected open pollinated varieties, in particular, lettuce and beans. This is done by seed producers, plant raisers and large specialist growers. It is estimated that in certain lettuce types infringement exceeds 35%. Many illegally reproduced seeds are marketed and sold under old generic variety names, so AIB keeps a close eye on the market to obtain samples of illegally reproduced seed.

In Eastern Europe and Central Asia, the F2 production of PVR hybrid onions is very substantial. The problem here is that in many cases the F2 onion is physically very similar to the F1 onion, making physical detection difficult.

Other types of infringements AIB is addressing are counterfeit seeds and variety fraud.

Counterfeit seeds are sold in fake packages, and the seeds in these packages are not the varieties as indicated on the label, but most often inferior type of seeds of unknown varieties. The growers who purchase them in good faith are often victim of crop failure.

An example of variety fraud is when growers order (and pay for) young plants of a certain variety,

but receive a different (and most often an inferior) variety. This problem is recurrent in rootstock, and sometimes leading to catastrophic consequences for growers.

As IP piracy has very often a linkage to other illegalities like phytosanitary and seed law offenses, tax evasion, labor exploitation, fraud and unfair competition, enforcement agencies of different kinds are receptive to AIB's denunciations. Unfortunately we find many countries not actively monitoring seed law infringements. In addition, the penalties for seed law infringements tend to be too low to be deterrent.

In several cases the criminal investigations made found proof of organized crime, whereby the illegal operations involved a network of companies spanning different countries and continents.

Profits from piracy are high. The financial benefits reaped by the lettuce growers in Europe, who buy the illegal seed of PVR varieties at very low prices, amount to a very significant US\$ 400/acre per production cycle. Just for the southern part of Italy, it is estimated that the undeclared harvested crop from illegally grown PVR cherry tomato plants amounts to several hundreds of millions US dollars.

Challenges in enforcement PVR in the vegetable chain

The biggest challenge of AIB is to find evidence of infringement to take legal steps ('burden of proof').

To prove vegetative propagation or/and selling and using stubs by plant raisers or growers, access to the greenhouse is a pre-requisite to carry out a mass-balance check, comparing the seed (or young plant) invoices with the number of (young) plants grown or sold, and, where applicable, plant passports. Similarly, to find evidence of illegal seed propagation, where seed is either mislabeled or 'brown bagged' without proper labels, a mass balance check has to be made at growers, comparing seed/young plant invoices with the invoices of the harvested product sold. The inclusion of clauses in the general sales conditions giving access to the seller to the growers' premises is not adequate for making unannounced inspections in many countries, as privacy law prevails. Access to the premises could eventually be obtained in these cases, but only with a delay of a few weeks after a first notification.

The only way for a breeding company to have immediate access to the growers' premises for inspection would be on the basis of individually signed (sales) contracts, in which this right has explicitly been agreed to ("extra locks on the door").

These circumstances made AIB seek close cooperation with the 'stake-holding,' technical enforcement agencies, which could be agricultural anti-fraud agencies, tax authorities, phyto-sanitary services, or police.

Similar to practice in other industries, it is the task of breeding companies to provide technical training to the staff of enforcement agencies on how to recognize illegal reproduction and fraud. A good example of this is the technical manual developed by AIB for enforcement agents how to recognize vegetative reproduced plants.

Salespeople of seed companies and their distributors are the eyes and ears of the seed companies. It is key that they report any suspicion of irregularity to their management. As salespeople often feel a loyalty conflict, talking negatively about their customers, the seed company's management has to address illegality in an explicit and consistent way : it should be a fixed agenda item of all sales meetings and individual performance appraisals.

Lessons learned

PVR protection provides the strongest legal ground to defend our IP against illegal reproduction. However, in fighting PVR piracy vertically in the vegetable chain, evidence of infringement in general cannot be obtained by the right holder himself, as inspections of the growers cannot be legally imposed from the general sales conditions.

In these circumstances public-private sector cooperation is key for effective enforcement of PVR.

A very important motivation for the authorities to work with the breeding sector on illegalities, is that IP fraud is often associated with other types of criminal activities, like tax fraud, use of illegal labor, non-respect of environmental laws, etc.

Practice in European countries has demonstrated the need for a specialized PVR Court(s), with trained prosecutors and judges. It is also important to have an accredited laboratory/laboratories to assist the Court in variety testing in any civil or penal legal cases.

Proof of piracy becomes apparent through mass balance analysis (comparing seed invoice with the number of plants grown) and is often the only way to obtain legal evidence of piracy.

Time to act against suspected piracy is short. The growing cycles are short (summer lettuce only takes 3-4 weeks, tomato young plants leave the nursery after only a few weeks).

It is vital to have suspicions confirmed very quickly by variety identification tests. As grow-out test take to long, DNA identity test results should be accepted by the authorities/courts for taking first stage legal action.

A very effective way of controlling IP fraud is the regular inspections by the authorities of any purchase documents (delivery notes, invoices) of seeds, young plants and produce. In Southern Italy, Police regularly checks the documents of all deliveries of fresh produce to the wholesale market.

When traders cannot show documents of purchase, the produce is confiscated and a high fine is given.

My conclusion

- 'horizontal' enforcement of PVR (legal disputes between breeders), where time and evidence-gathering constraints are not critical, has proven to be feasible and effective ;
- 'vertical enforcement' of PVR to combat piracy downstream in the vegetable business chain proves to be more difficult as it requires a supporting legal and institutional framework :
 - evidence of infringement cannot be obtained by the right holder himself as inspections of the growers are difficult / impossible without active help from authorities, breeders' enforcement efforts are not successful;
 - PVR enforcement is often hindered by the lack of effective enforcement of the national seed marketing regulations.

Consequently, some well-organized pirates have successfully been able to establish profitable business models.