



Why infringement of IP-rights should concern everybody

I. Executive summary

It is estimated that 5% to 9% of international trade account for trade with counterfeited products (source: speech of the German Federal Minister of Justice on July 6, 2006; [http://www.bmj.bund.de/enid/Juli/ 6 7 2 6 - Produktpiraterie_y6.html](http://www.bmj.bund.de/enid/Juli/6_7_2_6_-_Produktpiraterie_y6.html)).

Intellectual property rights are necessary to provide incentives and financing to innovation which leads to economic and social progress. They additionally encourage the production and dissemination of knowledge and high quality products; for consumers they can guarantee this quality and indicate a certain source of the product. By granting intellectual property rights innovators are enabled to benefit from their innovations and to prevent other's from copying as well as unfairly gaining from the innovators investment and creativity. Infringement of intellectual property rights (IP-rights) like plant breeder's rights, plant patents, trademarks etc. does not only harm breeders, but the whole industry dealing with ornamental plants and fruit plants (like producers and distributors) as well as consumers (II.1.) and, additionally, the society as whole (II.2.). CIOPORA as the international community of breeders of asexually reproduced ornamental and fruit varieties is taking several actions to support its members to fight piracy, to raise awareness among different stakeholders on the topic and takes influence on the law making process in various countries and international organizations to achieve better protection of such rights.

II. Effects of IP-infringement

In order to demonstrate the negative effect of IP infringement in the ornamental and fruit business, it is necessary to take a look not only on breeders but on all groups involved with the breeding, producing, trading and consuming of ornamentals, fruits and fruit plants. On a first thought one might assume it is only breeders who are interested in a strong IP-protection: It is commonly known that IP-rights are designed to encourage investment into new inventions, here plant varieties, and to reward a breeder for that investment. But taking a closer look, also other groups benefit from strong IP-protection and its enforcement, e.g. producers by better quality from new varieties, traders and wholesalers by new and improved characteristics, consumers because of nicer products, higher health and safety standards of protected varieties and, last but not least, the society as a whole by higher overall growth rates.

1. Effects of IP-infringement in the ornamental and fruit sector

a. Industry background

This paper focuses solely on vegetatively reproduced ornamental and fruit varieties (reproduction by grafting and cuttings) when describing the negative effects of improper IP-protection. In this sector a grower needs only a limited number of plants to produce hundreds and thousands of identical plants, which can be used for the production of other plants, cut flowers and fruits. The reason is, that for vegetatively reproduced plants no technical or natural barriers exist for reproduction (like F1 hybrids etc.), but that they are in fact very stable and relatively easy to reproduce. Growing ornamentals and fruits therefore is better comparable with an industrial than with an agricultural process. A parallel can be drawn to patented technical goods: here also a licensee does not need to be provided with base material by the licensor on a regular basis, but only needs access to the patented information/good once to be able to produce the product himself. Because no natural or technical barriers

prevent copying in the ornamentals and fruits growing business, a strong IP-protection is vital to protect plant breeder's interests.

Breeding of vegetatively reproduced ornamental and fruit varieties mostly takes place in the European Community, the United States and Japan. Nevertheless, we see an increasing number of ornamental and fruit plant breeders also in developing countries such as Kenya, Ecuador, China, India, etc.

A substantial part of the plant growing is carried out in various countries in Africa, South America and Asia. As the main sales market again are the industrial countries the products need to be traded, exported to, imported and then distributed in these countries. It is important to notice, that – in contrast to a very huge number of other products and especially agricultural products – the market for ornamentals is not regulated; for fruits hardly any regulations exist. Therefore ornamentals can be traded without any restrictions and trade barriers, what underlines their importance in international trade. Important reloading points for ornamentals are the Dutch and German Auctions in the EU, the Japanese Auctions in the Far-East and the flower trade companies in Miami for the Americas. From there the products get distributed from wholesalers to retailers in the consuming countries.

b. Effects of IP-infringement on breeders

The main ambition of breeders of ornamentals and fruit varieties is to create new varieties of pot plants, cut flowers and fruits. The added value of these new varieties is not primarily their (new) propagating material, but instead the harvested material. Plant breeding is a highly sophisticated and cost-intensive business. The methodologies of course can vary from crop to crop, but on average it needs 10,000 to 100,000 crosses in order to obtain a few hundred thousand seeds out of which one can develop in a period of 3 to 5 years between 5 and 10 new varieties which might possibly be successful in the market. New varieties usually have many advantages over older ones: they are – depending on the breeding target - more resistant against diseases (so less chemicals are needed in the growing process), less temperature sensitive or better transportable. Additionally, they have a modern shape, colour, fragrance and/or taste, longer vase-life and higher yield.

Breeding of the most important ornamental species is carried out to a huge extent by private, often small and medium-sized companies; breeding of fruit species often takes place in public institutes (because of the high costs accrued by breeding of such species).

The main source of revenues for breeders are license fees paid by producers of the plants. So the first, most apparent effect of improper IP-protection is a loss in turnover caused by IP-right infringement. Where third parties grow a variety without paying any license to the breeder, the breeder loses significant revenues.

Furthermore, an uncontrollable number of unauthorized end-products might find their way into the market. This again impacts other producers negatively, growing the same variety legally on basis of a license-contract. For them it becomes incomprehensible why to pay royalties where others get the same for free. By this mechanism the incentive for entering licensing contracts is weakened. As a result a downward loop of producers leaving the license scheme and so reducing breeder's revenues further and further accrues.

IP-piracy causes not only loss in revenues but generates additional, unproductive costs. The right holder has to carry out investigations to gain the information necessary to pursue an infringement; he needs legal advice and has to pay for court actions. Costs for such proceedings might easily increase to a substantial amount.

Due to procedural regulations in most countries these costs will only to a limited amount have to be compensated by the infringers.

By losing turnover and growing costs, also the calculated return on investment shrinks. In a worst case scenario this might force a company out of business, especially since it are often small and medium sized, family owned businesses, which are involved in breeding. But even without such a final consequence, a breeder who needs to calculate on a low (if any) return on investment due to improper IP-protection will not be encouraged to develop new varieties. This again has a negative impact on the employment situation. Where less new varieties are developed, less people are needed (see below at II.2.).

Finally, the damage on the image of breeders by IP-piracy should not be underestimated. Although it is possible to grow an almost indefinite number of plants not only from the original elite material or the mother material but also from self-propagated cuttings or plants, only for the former an excellent phytosanitary condition can be guaranteed, whereas the latter might be infected by viruses etc. As third parties trust on the said excellent condition the reputation of the breeder will be considerably damaged where contaminated material circulates even if the breeder himself has no chance to prevent this where a IP-protection does not function properly. Since counterfeited goods are often of lower quality not only regarding their phytosanitary condition but also with respect to their vase life, fragrance and/or taste, consumers will be dissatisfied with the good purchased and might in future not only avoid purchasing the same variety but the whole species, e.g. believing that any rose or carnation or apple etc will be of dissatisfying quality. This effect will not only harm the breeder of the said variety but all breeders of that species.

c. Effects of IP-infringement on producers

Infringement of IP-rights has negative effects on fair and honest producers as well as on IP-pirates.

Honest producers have significant financial interests in an effective protection of IP-rights and their strict enforcement. If an IP-protection system does not function properly, they will suffer – due to the described lower incentive for breeders – from a limited choice on new varieties. Some chances for generating turnover get lost, because new varieties create a greater (new) need for supply whereas the market will be faster saturated with older varieties. Additionally it has to be taken into account, that new varieties usually attain higher prices than the older varieties, so with the same amount of sales more revenues will be generated. Furthermore, honest producers pay license fees, a cost those producers who illegally produce plants do save. This leads to unfair competition between honest producers and infringers.

So breeders who actively fight IP-infringement protect not only their own interests but to a large amount also that of honest producers.

Negative implications of IP-infringement on IP-pirates are even worse. First of all, IP-infringement is a criminal act in many countries; so criminal prosecution and penalties might be the consequence for the infringement of IP-rights. Wherever an unlicensed production will be detected, the whole mother stock and harvest might be destroyed. Secondly the infringer might be sued for damages by the right-holder. Furthermore, when a violation is ascertained, the right holder might claim for information and disclosure of financial statements in order to numeralise his damage claim.

Damage claims might not only be filed by breeders, but also third parties. Where the result of plant growing without license are products of lower quality, infringers also need to fear damage claims from their customers, e.g. because they paid an

unjustified high price, they got an product untruly labelled as disease resistant or because somebody gets physically harmed by the product.

d. Effects on trade in general (exporters, importers, wholesalers, retailers)

The effects on exporters, importers and other traders for dealing with illegally produced plants are in many respects comparable to the effects on the producer himself.

First of all, and regardless whether the person trading a product knows about the IP-right violation, the sale of the illegal products has to be stopped immediately and the products might be destroyed when detected.

Players who unknowingly purchase counterfeited goods very likely will pay an inappropriate price (namely the price for the assumed original product). According to the laws of the countries concerned traders might also become subjects to damage claims, which might depend on their level of liability (negligence, deliberateness). Furthermore, the same duties as described above for producers can be imposed on any distributor on disclosing information.

Whenever a shipment of plants raises suspicion at the customs significant time and money might be lost here. Regulations on customs control become increasingly sophisticated and effective; right holders more and more make use of their possibility to apply for seizure at the border and stop infringing products.

In sum, the risk for dealing with counterfeited products increases, since trade chains become more and more transparent, in addition stricter legislation and jurisdiction leave diminishing chances for traders of infringing goods to excuse and justify their doings.

Under certain laws, e.g. Council Regulation (EC) 1383/2003, on application customs will control goods passing the border and suspend their release in case they are suspicious to violate IP-rights. Depending on how long it takes to finally clarify the legal situation, this procedure might easily delay the whole process for weeks. If the goods concerned in fact violate IP-rights, they will be destroyed. Needless to say that costs for shipping and purchase are sunk whenever indemnification claims are not promising (either because the exporter/importer/trader knew or had to have known about the IP-right violation or because of reasons in his contracting partner). In this respect it is interesting that for example the German courts impose a duty on every single member in the value chain to verify, whether any IP-right is tangent and might be violated, especially for cross border transactions. It has at least to be checked, whether the party one is obtaining a product from did execute a compliance check with IP-rights with reasonable care (German Federal Court of Justice, decision of 14.02.2006, X ZR 93/04, para. 28).

Additionally, when detected at a border, a country might exclude a whole variety or species from passing borders. This might happen for example if (on unlicensed plants) a virus is detected, which might harm other populations as well.

Another consequence on dealing with counterfeited goods is that the image of the trader concerned becomes damaged as soon as this fact becomes known. This damage is twofold: First, the customer (whether another trader or the end-consumer) is dissatisfied with the good purchased; secondly, the trader is held to be involved in product piracy, thus criminal activities. As especially bigger and well-known trading houses cannot tolerate such risk, wholesalers being suspicious of dealing with counterfeited goods will be excluded as supplier very quickly and loose considerable business.

e. Excuse: Effects on auctions as an important trade channel

One of the most important distribution channels to wholesalers are the Flower Auctions. E.g. about 60% of the international trade with cut flowers and 40% of trade of pot plants are handled in the Netherlands. Round about 100,000 transactions take place in auctions every day (Source: VBN - Vereniging van Bloemenveilingen in Nederland, <http://www.vbn.nl/en/overvbn/veilingen/index.asp>). Especially most of the cut flowers (90%) but also 50 % of pot and garden plants are sold in auctions. The principle of the clock makes the system very efficient and extremely fast.

Given the said numbers one can easily imagine, what happens if the clock has to be stopped because a breeder claims violation of his rights and presents a title prohibiting any further sale of his products: much time and a lot of money will be lost. If breeders are enforcing their rights on a regular basis on this way this might affect the efficiency of the system – and of transactions volume – notably. Needless to say that as a second effect customers will lose trust in quality of the traded products and therefore in the whole auction system.

Additionally, auctions might be sued and held liable for any infringement of plant breeder's rights or other intellectual property rights. Consequences might differ from country to country. (For example in the European Union under Directive 2004/48/EC on the enforcement of intellectual property rights also intermediaries are liable for intellectual property infringements. Art. 11 of the said directive states that "Member States shall ensure that right-holders are in a position to apply for an injunction against intermediaries whose services are used by a third party to infringe an intellectual property right". Organizers of auctions are such intermediaries. At least the continuation of the infringement might be stopped by legal actions; but Member States might also impose a wider liability, e.g. to damages).

f. Effects on consumers

Consumers are also harmed by infringement of Plant Breeders Rights and other IP-rights.

Firstly, due to the fact, that breeder's incentives for developing new varieties are impaired, consumer's choice is limited to a smaller number of new varieties.

Secondly, a likelihood of confusion arises between products based on pirated material entering the market and original products. Especially where such products are trademarked and also the trademark is copied identical or confusingly similar such risk is virulent. But even if a trademark is not violated and even if the laws on Plant Breeders' Rights are not explicitly aimed at avoiding a risk of likelihood of confusion they do protect new developments in plant qualities. Often breeders will also emphasize these new attributes in advertising campaigns for new varieties. Therefore consumers trust on these qualities when purchasing a special variety. This trust will be destroyed by pirated products.

And most important, an end-product based on irregular growing material might show various discrepancies in quality; they might be infected with viruses, be less resistant against diseases, having a shorter vase-life etc. So consumers might purchase and consume low-quality products – which might also cause negative health and safety implications. Needless to say that such poor deals leave consumers mostly without any money-back guarantee or other kinds of remedies.

2. Effects on society as a whole

Last but not least, societies as whole will be harmed, where no sufficient protection of intellectual property rights including an efficient enforcement of such rights is provided for.

Like already mentioned, IP-rights are an essential and indispensable incentive for innovation. Countries which do not offer an adequate system for IP-protection will loose innovation and will therefore also have a limited choice in product varieties.

Especially for developing and newly industrialized countries an effective IP protection system will establish an economic advantage. In these countries horticulture is one of the fastest growing sectors of the economy. The production of ornamentals and fruits creates year-round jobs and thus stable income for many families.

Only such countries where breeders trust on an efficient IP-protection will be able to attract investments in its ornamentals and fruit growing industries. Vice versa, economies with insufficient protection levels will attract a lower investment level causing also lower overall employment and a reduced rate of economic growth. This also effects tax revenues (VAT and others) in these countries; counterfeiting diminishes tax revenues in all countries concerned. The World Economic Forum Global Competitiveness Report 2004 indicates a correlation between the protection of intellectual property rights and national competitiveness. In 2004, the 20 countries that were perceived as having the most stringent intellectual property protection were classed among the top 27 among the WEF's growth competitiveness index. Conversely, the 20 countries that were perceived as having the weakest intellectual property regimes were ranked among the bottom 36 in growth and competitiveness.

Finally, it is often mentioned, that the production and trading with counterfeited goods is an important source for financing organised crime. First of all, counterfeiting itself normally takes place in an industrial background violating intellectual property laws, criminal laws, but also employment and environmental laws; often child labour is exploited illegally, additionally tax crimes and fraud against bona fide customers are committed regularly. This already falls under the definition of organised crime. Furthermore, existing (criminal) networks can be used for smuggling and money-laundering and the profits can be used for other forms of organised crime – like it is feared also for terrorism. Low risk of prosecution (in many countries almost no legal sanctions exist for counterfeiting) and enormous profits make counterfeiting an attractive enterprise for organised crime groups. Therefore the risk-profit-ratio for trade with counterfeited goods is often more attractive than in other criminal industries. Especially the production of counterfeited ornamental and fruit varieties therefore might be attractive instead of the production of drug plants. No exact numbers are available yet for the importance of the horticultural sector for financing organised crime. But in order to prevent organised crime, also piracy on Plant Breeders Rights, plant patents etc. need to be fought.

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