The business magazine for horticultural plant breeding

Ciopora Chronicle

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CIOPORA

APRIL 2013

What is essential is (sometimes) invisible to the eyes. Innovation as driving force of the market!

PBR TOPSY-TURVY

How UPOV and its members turn the system upside down

SEEING DOUBLE… YOU BET

Minimal distance between varieties

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CIOPORA Members

Become a member of CIOPORA

CIOPORA is an international, non-governmental organisation representing the interests of breeders of asexually reproduced ornamental and fruit varieties worldwide. CIOPORA has currently 117 members including individual breeders, breeding companies, IP lawyers and royalty administration services. Top priority of CIOPORA is the constant development and enhancement of systems of Intellectual Property Protection for plant innovation, which include Plant Breeders' Rights, Patents, Plant Patents and Trademarks. CIOPORA acts as a strong voice of the industry in regard of IP protection. The association enjoys the observer status at the Community Plant Variety Office (CPVO) and the International Union for the Protection of New Varieties of Plants (UPOV).
The Board invites you to join CIOPORA's global member community. The persons eligible for membership are defined in the CIOPORA's bylaws. Each member candidacy is subject to approval by the CIOPORA Board.

More information about membership: www.ciopora.org.
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Breeding industry 'manifesto' reflects strong visions and daily praxis

It is a great pleasure for me to welcome the readers of the **CIOPORA** Chronicle again. This is the fourth edition of the "collection magazine" edited by FloraCulture International B.V. in cooperation with **CIOPORA**, the International Association of Breeders of Asexually Reproduced Ornamental and Fruit Plants. The cooperation between our association and the editors of FloraCulture International has developed through the years, and today we can say that it has reached a satisfactory maturity. The magazine is very much appreciated by the flower and fruit industry for its high level of contents and its very professional and pleasant editorial layout.

CIOPORA is the reference for the Intellectual Property matters in the flower and fruit industry worldwide, while FloraCulture International has positioned itself as the leading magazine of floriculture worldwide, reaching more than 20,000 professional readers on five continents. This makes the **CIOPORA** Chronicle a "must-read" for breeders, growers and traders, and every year the topics discussed in the magazine are object of debates and sometimes, polemics between experts.

The goal of the **CIOPORA** Chronicle is to update professional readers worldwide on the hot topics of the Intellectual Property protection in vegetal varieties, as well as with comments and analyses including our own view, but also giving voice to others such as growers associations, scientists and lawyers, who are invited to contribute to our comprehensive vision of the business.

But let me say that this edition of the **CIOPORA** Chronicle is different from the previous ones. The novel character of the issue 2013 begins with the cover of the magazine.
As some of the attentive readers among you might have noticed already, with our choice of cover picture we have referenced the theme of the book "The Little Prince" by Antoine de Saint-Exupéry. In our eyes the cover picture vividly demonstrates what **CIOPORA** is all about: the effective protection of ideas and innovation, and, above all, the social responsibility that comes with the act of creation and which must be borne in order to stimulate the future development of the industry. The widely popular book by de Saint-Exupéry reads: "You become responsible forever for what you've tamed." It is the same in the plant world – by creating new plant varieties, we are forever responsible for the protection of the results of this human activity. A further quote from the book which we picked as the headline for the Chronicle's cover is "What is essential is invisible to the eyes". In our view this phrase precisely reflects the nature of true innovation. As the main strength of great ideas and innovative products often resides in their simplicity, the time and the tremendous effort invested in their development can be so easily overseen by the end customer.

Furthermore, the content of this year's issue is indeed innovative. In the previous three editions we have offered our readers a high level of information and analysis on IP in flowers and fruit. However, I believe that we have really touched THE real core topic of our industry this time, the subject that is of the highest pertinence and the deepest importance for the future of the flower and fruit business.

From the President

How to really and effectively protect **TRUE INNOVATION** in the vegetal world? This is the hot topic today, the main question that the breeding industry and, consequently, also the other segments of the supply chain ask themselves and the legislative authorities. As I always emphasise, there cannot be any economic development without innovation, and there cannot be any innovation without a solid and effective Intellectual Property system. This is true for all businesses and industries, but it is especially true for highly creative and trend sensitive markets such as art, fashion, design, flower and fruit breeding and production.

Now, the plant industry is divided between those who believe that the plant varieties protection through the **UPOV** system is effective and sufficiently covers the rights of the breeder and those (not only breeders!) who realise that the principles of the **UPOV** Convention discussed and approved more than 20 years ago are not satisfactory anymore because the new methodologies and techniques in genetic improvement produce results that need different and more sophisticated tools for their effective protection. Therefore, concepts and provisions relating to matters such as the actual scope of protection, the Essentially Derived Varieties, the Breeders' Exemption and the assessment of distinctness itself, probably need to be addressed again to react to the needs of the industry that is becoming more competitive, more advanced in technology and science, more sophisticated in product development and marketing strategies and more demanding in terms of investment and expected return.

Once more, I am pleased by the extremely high level of the contributions to this magazine, which has become a true 'manifesto' of the breeding industry, written by some of our member breeders, by our experts and by renowned authorities of the world of Intellectual Property. The original concept is to demonstrate all or at least various links in the production chain: the supply chain mechanism in horticulture, the marketability of innovation (breeder-grower relation and what is in between), innovative products marketed via innovative marketing and communication channels (what are the expectations of consumers?), as well as new IT solutions for breeding. The focus is also on the fruit industry, overviewing the present and future developments in fruit breeding in the EU.

And, last but not least, **CIOPORA**'s Secretary General again develops his advanced and sometimes provocative vision on the above mentioned topic of **PROTECTION OF TRUE INNOVATION**. His impressive article, though written on a sunny Sunday, explicitly puts under pressure some common opinions about the effectiveness of Plant Breeders' Rights in the actual world, demonstrating an objective and rational approach the huge loopholes that presently exist in the **UPOV** system and that make many of the basic concepts of Breeders' Rights very weak, unclear and sometimes useless for the industry.

If we look back to the **TRIPS** agreement, we should once again remember that the Intellectual Property protection tools (laws) in the contemporary trade system must be "effective". For plant varieties this can be provided in form of an effective *sui generis* system. For many years already **CIOPORA** has been stressing that this is not the case anymore, because even the youngest **UPOV** Convention of 1991 is rather old and unclear in many of its fundamental parts. The discussion is open. Your opinions are welcome. And there is no better platform for the exchange of ideas and research findings than **CIOPORA**'s Annual General Meeting, which this year is set to take place in Angers, France from April 22 to 25.

I am proud to say that we are a reference for the breeders' community all over the world, and that this Chronicle is becoming a forum for discussions that cannot be ignored by the industry, and that in ten years from now, we will proudly read it in order to confirm the achievements that we have reached for the benefit of the companies we are honoured to represent.

The Selecta breeding team once again managed to develop a ground-breaking innovation: they created a genetic mixture from the original Calceolaria species and a wild form and thus gave birth to their new Calceolaria line Calynopsis®.

Orchid lookalike marks the start of the spring

The new exciting Calynopsis® beauty for balconies and gardens has almost nothing in common with its ancestor, the slipperwort. Its long stems and globular flowers remind us of an orchid and this was the inspiration for naming the newly developed plant Calynopsis®.
From February until late summer, the Calynopsis® varieties continue to produce masses of colourful and spectacular flowers and join other market dominating crops like Viola and Primula.

Calynopsis® is an ideal patio plant.

Upmarket product

Being easy to cultivate and flowering continuously, the new varieties are perfect for producers and consumers alike. Despite of its delicate look, Calynopsis® are extremely weather-resistant and can even survive sub-zero temperatures. Therefore it is not surprising that retailers and garden centres are keen on this breakthrough novelty. By selling Calynopsis® they can set themselves apart from their competitors and offer their client a product with a completely new style. Whether being produced in small pots for mixed containers or in big pots to be sold as solitary plants, Calynopsis® takes a position as an upmarket product – a new garden orchid! Among the vegetatively propagated ornamentals there is no other product on the market that can be compared to Calynopsis®.

TASPO Award

No wonder that the media, as well as experts of the green sector have been showing their appreciation of this innovation. Consequently, Calynopsis® was awarded the coveted TASPO Award for the Best Breeding Novelty of the Year in Berlin in November 2012. In Germany, the TASPO Awards are the so-called "Oscars" of the green sector and are awarded every year in more than 20 different categories by the professional horticultural magazine TASPO.
After having received the prize in 2010 for breeding the first double flowering Osteospermum on the market, Selecta managed to take home the award in this category for the second time already. This is definitely a reason for Selecta to be proud!

Protection

Calynopsis® will be showcased in a high-quality consumer magazine this spring and has also been chosen by a big European retailer chain as a core product for the spring season 2013. The product can rightly be called a real breeding breakthrough. There is no doubt that Selecta Klemm is doing everything in its power to protect its Intellectual Property Rights on this ground-breaking innovation and the varieties belonging to the Calynopsis® line will of course be protected by Plant Breeders' Rights. In addition to this, the name Calynopsis® had also been registered as a Community Trade Mark. |||

Marketability of innovation - the power of ideas in horticulture

Most people believe that breeding and product development in horticulture is all about dabbing pollen, emasculating flowers and ruthlessly rogueing fields and fields of seedlings. To be sure, these are all facets and integral parts of the breeding process-but do not necessarily make for true innovation.

by Garry Grueber

Innovation is something that takes place deep in the convolutions of our grey matter - sparks and flashes of creativity in our minds, ideas and visions that stretch the boundaries of what is generally accepted as common knowledge, as standard assortment. These are the ideas that can truly transform the industry.

Competitive pressure

Most professional breeding companies concentrate on mere incremental advances and variations on products that sell well, either out of competitive pressure, i.e. "keeping up with the Joneses" to prevent their successful product lines from being perceived as stale and outdated, or to maintain relevance in the marketplace. Professional breeding companies are rarely a suitable petri dish for true innovation. All too often, such enterprises see breeding and product development in terms of input versus output. But this model can only work for commodity mass crops, where the outcome (i.e. sales of seeds, cuttings or young plants) is calculable.

A conservative bunch

Given the fact that their immediate clients are growers, professional breeding companies all too often breed with only the growers' interests in mind: yield, habit, uniformity, cultivation time, keeping qualities under transport conditions, etc. From a purely commercial standpoint, this strategy makes perfect sense - the breeding companies provide what their customers ask for. However, growers are often quite a conservative bunch, rarely interested in changing the crops they are comfortable growing, or in taking on new challenges. Hence, they do not exactly make the best forum for presenting or sourcing new ideas, for true innovation.

When growers are actually willing to embrace innovation, adapt their cultural practices and accommodate for the needs of a totally new crop, this can give them the vital differentiation they need to be profitable in an otherwise fiercely competitive marketplace.

Leave your comfort zone

True innovation only occurs if you are willing to leave your comfort zone and hence challenge the comfort zones of your clients and that of the industry as a whole. Breakthroughs in breeding or product development are rarely welcomed by our industry in the first instance. Instead, they are usually met with scepticism and opposition from the growers. Every time a major innovation occurs in the floriculture industry, a flurry of protests, scorn and resistance invariably ensues. All too often, interesting products are rejected by the industry because they don't "fit the mould" meaning they don't fall within the cultural techniques and regimes commonly applied in commercial horticulture. When growers are actually willing to embrace innovation, adapt their cultural practices and accommodate for the needs of a totally new crop, this can give them the vital differentiation they need to be profitable in an otherwise fiercely competitive marketplace.

Passion

That is precisely why true innovation is often generated by smaller independent breeders - individuals with a passion for plants, with a vision for creating something new, different, better - people with ideas that have the potential to truly transform. In many cases, their "crazy" ideas actually result in the creation of something totally new, something hitherto unheard of. A fitting analogy would be to compare this process with the IT industry. Quite often, the small start-up companies are the ones that generate all the innovation and technological breakthroughs - and are subsequently bought up by the Microsofts and Apples of this world.

Quite a gamble

Innovation is not born of fear. Innovation cannot be fuelled by the prospect of financial advantage alone. The outcome of a truly innovative approach to new products is usually quite uncertain. The stakes are too high and more often than not actually quite a gamble. Developing truly different, ground-breaking plant products requires a certain degree of altruism and idealism, and can only thrive in an environment that is con-

ducive and supportive of creativity and out-of-the-box thinking.

Creative individuals

Having worked in product development and breeding for over three decades, I have seen time and time again how products that almost everyone thought had no commercial value whatsoever became huge crops in the floriculture industry thanks to the vision and ideas of creative individuals. Drab roadside species that one would normally tread upon without sparing a second thought in their natural habitat, will often develop their true potential in the breeder's skilled and patient hands, and can flourish if the right niche and application is found for it in the marketplace. In many cases, well-known products can be re-vitalized and re-vamped if presented in a different manner or for a different use.

Audacity

A breeder has to have the audacity to try crosses and breeding strategies that would normally be scoffed at as "impossible". Our categorization of plant genera and species has until now been based on morphological characteristics only. With the advance of DNA technology, we are beginning to realize that many of the plants we have arbitrarily lumped together in one genus are in fact far less related than they are with species of other genera. Once we realize that interspecific and indeed intergeneric crosses are not out of the realm of possibility, bright new horizons for plant breeders present themselves, along with the potential for myriads of previously unthinkable and exciting new plant products for the future.

That said, breeders can only be commercially successful if their innovations are indeed accepted and embraced by the marketplace. Hence, breeders and product developers always have to ask themselves: Will this product work for the grower? Can it be propagated efficiently and economically? Will it present itself well at retail? Can it be shipped successfully? And, most importantly: Will it work for the consumer?

Some of the biggest brands in horticulture owe their success to precisely this combination of exceptional, innovative genetics with a well-executed and comprehensive marketing campaign to drive the message to a broad audience of growers, retailers and consumers.

Challenge

Many truly innovative products that have real benefits for the consumer do not readily reveal their positive traits at retail. Indeed, many products with exceptional vigour and enhanced consumer performance often pale in comparison with flashier, yet inferior product lines on the retail bench. Such products require a great deal of communication, specific POP material and extensive PR campaigns on consumer level to convey the benefits to the consumer. This is a true challenge, since such communication requires a great deal of resources and a professional marketing strategy to effectively bring the message across. Some of the biggest brands in horticulture owe their success to precisely this combination of exceptional, innovative genetics with a well-executed and comprehensive marketing campaign to drive the message to a broad audience of growers, retailers and consumers.

Holistic approach

Ideas really do have the power to transform the industry and truly change the marketplace but they require perseverance, tenacity, resources and the right platform for successful implementation. But sadly, a new variety, a new concept on its own will not get very far. Moreover, a holistic approach that takes all aspects of commercialization into consideration is needed. Most importantly, industry leaders have to be willing to embrace and effectively transport the innovation into the marketplace. The power is yours.

About the author

Garry Grueber has been involved in product development for over three decades. He has worked closely with many breeders from around the world, and has been involved in the successful introduction of many new product lines, varieties and marketing concepts over the years. He is now a managing partner in Cultivaris North America LLC, an idea- and project-management company based in San Diego, CA. (www.cultivaris.com)

Biancheri Creations® is an Italian breeding company, specialised in the breeding, production, and marketing of Ranunculus and Anemone.

Biancheri Creations® combines centuries-old traditions with revolutionary research

The company's research has allowed the increase and improvement of the range of varieties currently traded on the market. The constant modernising of the production structures and the meticulous sanitary control have produced flower varieties of the highest quality, ready to be marketed all over the world.

Family business

The Biancheri family developed their business in Italy during the late 1800s back in the days when the western area of the Ligurian coast (Ponente Ligure), around the town of Sanremo, came to be known as the "Riviera of Flowers". Antonio Biancheri, who at the time used to export rose petals across the Alps for the production of perfumes, started importing Anemone bulbs from France and selling them on the Ligurian market.
In 1982, as the Ranunculus, a species similar to Anemones in terms of growing cycle and method of cultivation, affirmed its position on the market, Alberto Biancheri decided to set up Biancheri Creations®. This is a company that combines experience-based traditions with revolutionary research.

International appreciation

Among Biancheri Creations® most sold varieties worldwide are Ranunculus cut flower lines (Elegance®, Success®). They are mostly present on the Italian, French, Dutch, Israeli, Greek and South American markets. However, in the USA, Japan and Northern Europe also potted Ranunculus are also in high demand.
Last year, 60% of Biancheri Creations® productions were marketed outside of Italy, and the international appreciation for Ranunculus is definitely increasing every year.

Breeding and research

Breeding and research are of course the key for the success of Biancheri Creations® varieties.
In order to meet the high standards set by the global market, a research team constantly works on the improvement of the existing varieties and the creation of new ones.
This is how the company's experimental policy was born. It required important investments and allowed to launch the production of vitro lines. Ultimately, the company set up the nuclear stock greenhouse to control and maintain the health of the cloned varieties, in addition to the permanent research and development laboratory that performs on the required virologic controls and in vitro breeding.
In order to efficiently show the uniqueness of its products, Biancheri Creations® has created a showcase greenhouse. It is a fully-fledged flower atelier, allowing visitors to observe all the varieties throughout their production cycle. The atelier greenhouses are located on the premises of Biancheri Creations® in Camporosso and are open to the public, upon prior reservation, from November to April.

Pon-Pon® collection

In these greenhouses, Biancheri Creations® now also presents its new Pon-Pon® collection.
The Pon-Pon® range of Ranunculus comes from long and professional research, its target being the selection of a new flower that can be offered to the final consumers in its best shape and at the same time has an outstanding vase life.
Through an accurate work of genetic improvement, Biancheri Creations® is now happy to offer a new flower with elegant round-shaped blooms (the "pon pon" shape), an exciting and innovative look that combines the sophisticated elegance of a multicoloured petal (which always includes a green part, combined with all other colours in different varieties) with the strength of a green leaf, and a strong stem.
The Pon-Pon®, propagated exclusively in vitro, maintains the well-known essential qualities of the Success® varieties (the distinctness, uniformity and stability obtained through in vitro propagation, which represent and outstanding improvement compared to the seed lines) of which it is a creative evolution. For its unique aesthetics, The Pon-Pon® ranunculus is already a great success in the main European markets and is constantly sold-out.
As a sign of gratitude to Mother Nature for this unbelievable gift, Biancheri Creations® has decided to dedicate this line of varieties to the children of the Istituto Pediatrico Giannina Gaslini in Genoa, which will receive a share of the income.
The Pon-Pon® ranunculus is for sure a good example of ground-breaking innovation that shows how many years of high level professional breeding can lead to results that represent a definite progress in the ornamental value of a new flower line, with new traits and features that stand out against the rest of the available products.
Biancheri Creations® believe that these kind of innovations deserve specific, stronger protection in order to allow the breeder to recover the costs of such a breeding effort and possibly be motivated to venture further. |||

Innovation is not a one way road: only extremely seldom an act of a product creation also generates a new consumer for it. More often, the success of innovation strongly depends on the keen perception of needs of an already existent customer group.

Contemporary marketing solutions for horticultural businesses

by Kindal Marin

In our age of the WEB 2.0, new Internet-based marketing channels allow every player on the market to have an ear for their target consumer and not to wonder in the dark. I am the Director of Marketing at Bell Nursery (Elkridge, Maryland), and a marketing specialist with more than 15 years' experience in projects including public relations and social media. I would like to share my expertise on all things old and new in marketing for horticultural businesses.

Bell is known for its meticulous attention to detail to make sure each and every final product reflects the highest standard of quality.

Traditional communication

Not all that long ago businesses of all types had limited avenues of communication with consumers. Advertising and public relations, including media relations, sponsorships and promotions, were the two main options. Those with large budgets are the advertisers of yesterday and today. We know their symbols, sing their scores and buy their products.

Public relations is typically less expensive, and allows companies to tell a story. But still, we were several messengers away from the consumer, and like the game of telephone, the farther you get from the consumer, the less the message resonates. Meanwhile, significant monthly public relations retainers or project fees are often unaffordable and offer little, if any return on investment.

Social media

Enter social media. At this point if you're not on social media, you're already a dinosaur. Get there, fast. Beyond being the fastest growing communications medium, it is the ideal outlet for our industry to speak most directly to the consumer, to tell our unique stories, to be the real thing in a culture that yearns for everything "green". It is a place we can educate people on the value of our products, and show them how to be successful stewards of the plants we nurture with tender pride.

According to social marketing coach, consultant, and global keynote speaker for mainstream business, Jeff Korhan, in New Media and Small Business Marketing, more than 70% of adults are online using social media. The internet is their leading source of information for making buying decisions. Social media is your opportunity to influence those decisions directly.

Facebook is by far the most popular social networking site in the world. For several years before our nursery revamped its web site, Facebook was our primary means of online marketing. It's easy and it's free. The hard part is putting up meaningful content that will attract and keep people following and interacting with your page.

Youtube.com is a service that allows you to upload videos free of charge to the internet. These videos can be informational, instructional, news or announcements – whatever you dream up. You can say whatever you want, to whatever audience you want to say it to.

Pinterest.com took off a couple of years ago as an online wish list and scrapbook combined. Pictures are "pinned" and shared around. Have something new and innovative? Share it. Ideas, products, care tips, the sky is the limit. We call this one "picture perfect" for our industry.

Content

Sounds super easy, right? The challenge is content. What are you going to share that other people want to share? What is meaningful, interesting, or otherwise irresistible? It's not hard, but it does take time and consideration. How much? How often? When? What? The same questions apply no matter which social media outlet you're using.

At Bell, we use photography to share the joy of our plants at every stage - from plugs to the store shelf. We are a wholesale grower of annuals and perennials, as well as distributor of trees, shrubs and

Field production at Bell Nursery.

tropicals. We sell exclusively to The Home Depot in all or part of seven states including Virginia, Maryland and Delaware as well as the District of Columbia, Philadelphia, and the Southern Ohio Valley. We pride ourselves on full, locally grown plants packed with just-cracked color at retail. We have more than 220 production acres, including 75 acres of greenhouse space and 35 Network Growers. This network model allowed us to successfully expand our production capabilities, with limited capital risk, and offered families on Maryland's eastern shore an additional revenue source for their farm property.

From the greenhouse to The Home Depot

Once ready for retail, Bell plants generally travel fewer than 100 miles (often as few as just 15!) to one of our four regional distribution centers in Maryland, Delaware, Virginia and Ohio. From the distribution center, plants are delivered to one of the nearly 200 Home Depot stores Bell services in three divisions – the mid-Atlantic, south-Atlantic and southern Ohio Valley. Each distribution center is served by a centralized or network of field and greenhouse operations to provide fresh, locally grown quality plants. This system ensures most of our plants travel fewer than 200 miles, all within 24 hours, from the greenhouse to The Home Depot.

Once our plants arrive at The Home Depot it is displayed and cared for by a team of more than 300 full time and 1000 seasonal merchandising employees. This team is in The Home Depot stores we serve 7 days a week, most days a year, caring for the product, and helping customers make informed plant selections, giving them the best chance for success when they get their purchases home.

Direct online communication

Over the past year, we have invested in our traditional public relations, Web presence and social media. This year, we are investing even more as we find positive returns on both our Web site and Facebook efforts. We have additional opportunities to expand our library of video offerings and to become a destination location for plant pictures on Pinterest.

The direct online communication we receive from our employees, Home Depot partners and consumers allows us to better serve or customer community by providing them with the same kind of service online that we ask our merchandising team to provide in the stores. Helping customers pick the right plant and care for it the right way so they are successful keeps them coming back to Bell-served Home Depots. We want to cultivate the next generation of gardeners, and online media gives us an opportunity our industry has never had before. It's knocking, open the door!

Once ready for shipping, Bell product generally travels fewer than 100 miles.

At Bell, we use photography (printed pots) to share the joy of our plants at every stage.

About the author

Kindal Marin currently oversees marketing efforts on behalf of Bell Nursery. She brings more than 15 years marketing experience to projects including public relations, social media and web site development. Kindal previously served as district manager for Bell Nursery where she oversaw visual merchandising at eight Home Depot stores in Northern Virginia. She began with the company in 2007 as a part-time merchandiser. Prior to joining Bell, Kindal was a public relations consultant for companies including Chipotle Mexican Grill, San Diego Natural History Museum, Deepak Chopra and the Gemological Institute of America. She began her career in public relations with The Gable Group, and previously wrote news stories for the San Diego Community Newspaper Group. A graduate of California State University, San Marcos, with a degree in history, Kindal currently resides in Annapolis, Md. Kindal Marin is Director of Marketing, Bell Nursery, www.bellnursery.com

Breeding 2.0: from field book to tablet

Everyone knows that paper field books are outdated. Smartphones and tablet computers are appearing everywhere. Anno 2013 you use a tablet or a smartphone with a direct access to a sophisticated database. This brings all relevant information in hand and saves a great deal of time by providing new opportunities in breeding and process analysis.

by Berno van der Geest

As the processes within breeding companies become more sophisticated and complex, it is vital for breeding businesses not only to remain up-to-date on the latest developments in breeding, but also to develop high performance knowledge sharing processes for their companies.

Wealth of opportunities

These days, breeders record more and more information about their breeding processes: in the greenhouse, in the field, but also in the laboratory. Additionally, the recorded information must be available at a glance: information about which parents have been crossed and about the selections made. Furthermore, pictures are becoming increasingly important. A vast quantity of information and a desire to have this information at hand, whatever the location, presents a challenge to modern breeders.

Luckily, the new digital age presents a wealth of opportunities. By using modern tablet computers and smartphones, breeders are no longer tied to their desks. Wherever they are, they can record information directly in digital format, easily share it with colleagues and look things up in their own information system. This article sketches some of new options the digital age presents to the benefit of the breeders.

Saving time in the working process

Breeders spend a lot of time in a field or in a greenhouse. Some even consider time spent at the desk as a waste of time. In our modern digital era with the omnipresence of the Internet, breeders also appreciate the convenience of being able to look something up in their breeding database using a tablet or a smartphone. They want to see the pedigree trees and the pictures of the breeding material and, while still in a greenhouse or out in a field, to be able to update the information and add actual observations, crossings, selections and images. This saves a considerable amount of time and offers breeders the option of making decisions on the spot.

Improving the analysing process

To simplify the breeder's work, even behind the desk, a sophisticated database for breeding can be very helpful. Such a database system should include the pedigree tree and pictures of the breeding material. With the help of the database, breeders can make powerful selections and process data in graphs or present it in their reports. Some database programs offer an extensive consolidation mechanism to convert multiple observations into a single figure for a genotype.

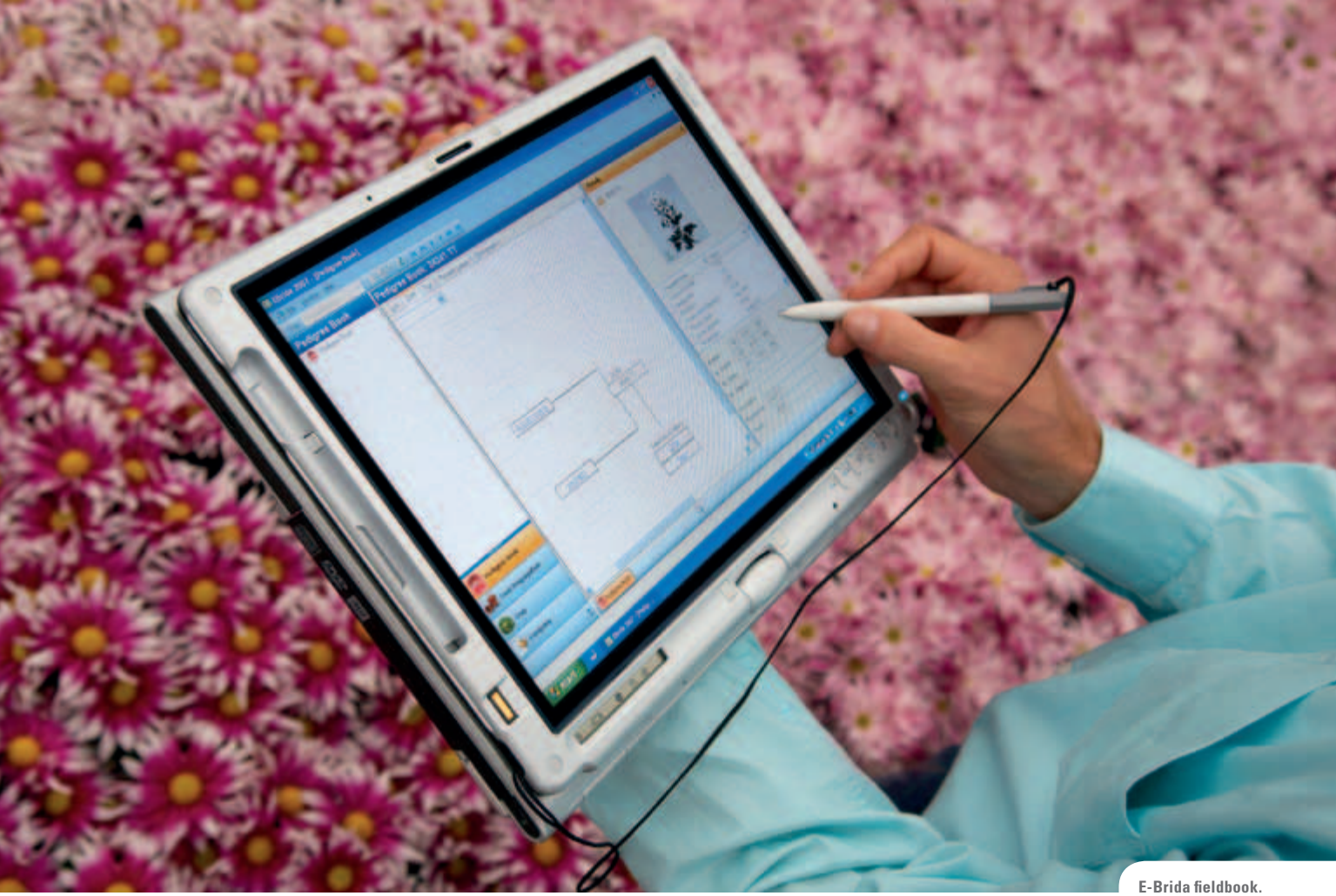
Tools help accelerate variety introduction

Modern breeding databases have powerful analysis options. These options provide breeders with an extra pair of eyes. Every breeder will recognize his/her top variety immediately, but these top varieties are rare. These are the sub-toppers which present a real challenge: good parents with strong genes. They cannot always be spotted immediately. Modern breeding databases can help find these toppers. By using comprehensive selection mechanisms breeders can accelerate the process of introducing new cultivated varieties.

Securing breeding knowledge

Breeders have a wealth of knowledge, but this is often only stored in their heads. Documenting this knowledge means it can be shared within their breeding companies. A consistent and continuous collection and recording of the

E-Brida tablet.



E-Brida fieldbook.

relevant information not only benefits the breeders working in a field or in a greenhouse, it also provides management with a deep insights into the breeding activities and assists with scheduling of the various steps of the breeding process. The ICT techniques remove barriers for using such databases in organisations with multiple locations, whether limited to one country or with breeding centres located around the world.

Breeding database: E-Brida

E-Brida is an example of sophisticated database system designed specifically for breeders. E-Brida is currently implemented in almost 40 companies from the EU, New Zealand and the US and is used by more than 100 breeders. Besides the ornamental plant breeders, in recent years vegetable breeders have also implemented the software package. The driving force behind E-Brida is Agri Information Partners based in Wageningen, the Netherlands. Agri Information Partners is specialised in IT solutions for breeders and has more than 15 years' experience in the sector.

In addition to E-Brida, Agri Information Partners offers customised software. "Our strength is that we speak the breeder's language. We know the breeding process down to the last detail. This means we can develop software that reflects exactly the working procedures and information needs of breeders", according to Berno van der Geest, one of the founders of Agri Information Partners.

New functionalities

What is Agri Information Partners' secret? "Our strong suit lies in our collaboration with the customer", says Van der Geest. He adds, "We are continuously working on the further development of our software and our customers are fully involved in this process. This benefits our customers and our product."

For development of the software Agri Information Partners uses the state-of-the-art methods and development tools. "We use the Scrum framework, and we can deliver functionality quickly and interactively. Furthermore, we have considerably automated the software testing. Our development process provides the latest version of the software every evening", says Van der Geest smiling. "It's a shame we cannot get breeders right on this process."

What Plant and Food Research NZ say about E-Brida

"E-Brida can successfully handle the breeding programme data and the complexities of the breeding structures" says Peter Alspach of Plant and Food Research, New Zealand. "We are already benefiting considerably generating accurate consistent pedigree information, capturing consistent field book information, creating reports for clients and removing the need for extensive wrangling prior to analysis. The excellent support for E-Brida provided by its parent company has been crucial to the success of the project."

About the author

Berno van der Geest is a co-founder of Agri Information Partners.

How Alexey Pajitnov regained the IP rights to his Tetris® computer game

Ciopora Chronicle sat down with Mr Alexey Pajitnov, the inventor of the charmingly simple and utterly addictive computer game Tetris.

by Anna Kaehne (with the kind assistance of Danny Han, Blue Planet Software)

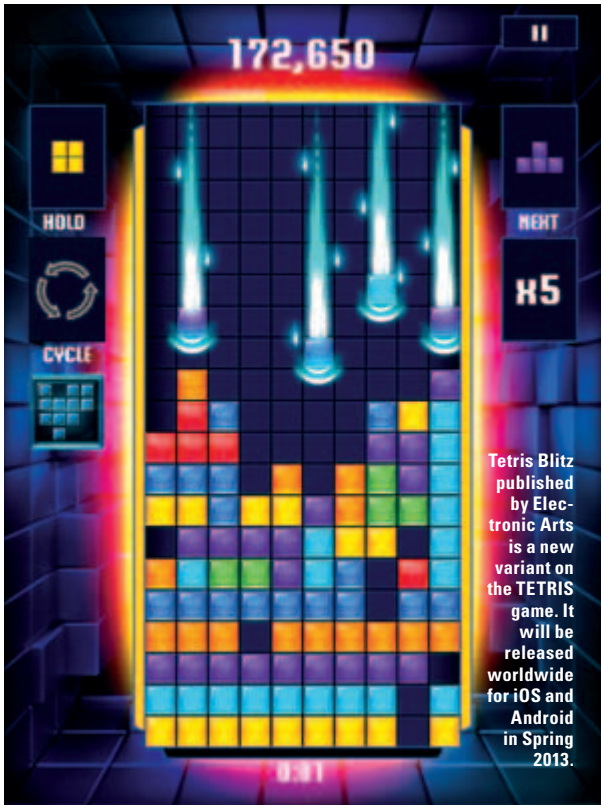
Alexey Pajitnov, a Russian scientist, created the Tetris game on June 6, 1984, and in its almost 30 year history, hundreds of millions of players worldwide have experienced Tetris. Now, Tetris branded games are played online and on mobile phones all over the world, over one billion times per month. Loved globally by people of all ages and all cultures, Tetris continues to be one of the most widely recognised and endearing video game franchises of all time.

Mr Pajitnov, since the moment of its creation in June of 1984, Tetris has conquered the world with a previously unseen speed and range. Hundreds of millions of Tetris branded products have been sold since. Tetris is largely recognised as the forerunner of the casual game industry. What is the unique quality that made Tetris so successful?

"Tetris is unique because it is a very simple game that offers both a visual and intellectual challenge for the player. People also seem to appreciate its peaceful, non-distractive style."

The notion of Intellectual Property was quite unfamiliar to the citizens of the Soviet Union as everyone used to work for state institutions back then. Was it self-evident to you that the Institution you worked for had the rights on the game?

"Intellectual property existed back then, but the concept was unfamiliar to people in the Soviet Union. For example, I think music and paintings and some other creations were recognized as IP. With Tetris, the Computer Center* exploited the game in the beginning. We had an arrangement but eventually the rights all came back to me."



Tetris Blitz published by Electronic Arts is a new variant on the TETRIS game. It will be released worldwide for iOS and Android in Spring 2013.

How did the acquisition of IP rights on Tetris go, back in 1988?

"I had a formal arrangement with the Computer Center in the 80s that granted them the right to exploit Tetris around the world for ten years. But, the rights came back to me later on."

Were you actively involved in signing the rights off to the Computer Center?

"I was somewhat involved but that was such a long time ago. I prefer not to think about it too much."

Who released the first PC version of the game in 1985? Was there a license agreement in force?

"Technically, I released the first PC version after it was ported to IBM. Basically, it was distributed to my friends and colleagues on floppy disks. Before I knew it, the game had spread all over the place."

When did you realise that the game was a global success?

"In 1989, at our first appearance at an industry trade show, our PC publisher brought us about 10 or

12 awards for the game. Later, in 1990 Nintendo decided to bundle the game with their new hardware – the Game Boy. These were certainly indications of the potential global success of Tetris."

How did you feel about your invention while not having the IP rights on Tetris during its first popularity wave in the late 80s and early 90s?

"I'm proud to have created a fun game that makes people happy. It was unfortunate that I didn't really receive royalties in the early days when the Computer Center was involved. However, that changed when the rights were returned to me."

When the rights of the game returned to you from the Computer Center, did you have a clear-cut plan about how to market?

"The rights were returned to me in the mid-90s. With the help of my friend, Henk Rogers, we formed The Tetris Company (TTC), to serve as the exclusive source of all **TETRIS** licenses. We continued to license **TETRIS** to some of the biggest video game companies like Nintendo."

What is the situation regarding legal rights on the game at the moment? Who owns the IP rights on the game and how and where are they registered?

"Henk and I own the **TETRIS** IP through a company called Tetris Holding. Among other things, we have numerous copyright registrations in the U.S. and the **TETRIS** trademark is registered around the world."

In your opinion, does the current system of IP rights in the US and worldwide provide a sufficient protection for your rights on Tetris and for other developers in the gaming industry?

"As a game designer, I am pleased with the current system in the U.S. We recently won a major infringement lawsuit against a company called Xio Interactive who had released a **TETRIS** clone on the App Store. We claimed that their game infringed the **TETRIS** copyright and trade dress and a federal judge agreed with us. She ruled that the visual expression of **TETRIS** is protected by copyright and trade dress and that the defendant infringed on both. It was a huge victory not only for us but for all game designers because the court officially validated that the visual appearance of video games is subject to IP protection."

Tetris inventor Alexey Pajitnov.

Do you have to deal with many infringement cases? What is the procedure for fighting the infringers?

"Like all IP owners, we deal with many infringements every year. Generally, we send take down letters to the developer or ISP and have them remove the infringing content."

Tell us more about the Tetris guidelines, by whom were they developed and why?

"We created the Tetris Design Guideline because we wanted to make sure that our licensees understood what a **TETRIS** branded game is supposed to look like so that they can create a **TETRIS** game that has the same unified look and feel. This is important because we want our customers to buy a **TETRIS** product and always know what they are going to get."

How are the Tetris guidelines enforced?

"The guidelines are enforced by our quality assurance (QA) team. Each **TETRIS** game must be submitted and approved by our QA testers before the game is released to the public.

Thanks to your inventiveness and the re-acquisition of your IP rights you were able to benefit from your invention. What would be your advice to inventors all over the world who are hesitant about the legal procedures to register the products of their creativity?

"Anyone who creates an IP should register their work if they are able to do so. Registering your IP provides many advantages to help IP owners enforce their intellectual property rights against third parties who attempt to unfairly benefit from another's original creation."

Mr Pajitnov, thank you very much for sharing your success story with us. **CIOPORA** wishes you and The Tetris Company a lot of success and the **CIOPORA** team and its members are looking forward to seeing new versions of the game appearing in the future, rewarding you and your colleagues for your invention, which brought so many hours filled with (often infuriating) joy to people all over the world. |||

** The Computer Center of the USSR Academy of Sciences.*

About the author

Anna Kaehne has been working at CIOPORA Office for almost two years. At the office she is responsible for association's internal and external communications including the relations with press, production of media and marketing materials offline as well as online. She is the person behind the association's newsletter, press-releases, website and other communication projects. Anna holds a Magister Degree in English and Slavic Studies from the University of Magdeburg. In her homeland - Ukraine - she studied International Law.

We once thought the PVR/PBR system provided breeders with a means to protect their Intellectual Property Rights (IPR), but now we are not so sure.

Seeing double... ...you bet

Mark Jury is a breeder from New Zealand with a long history of commercial plant releases spanning many genera from New Zealand. And yes, we have to declare here that we are their agents for introducing these exclusive plants to different parts of the world. He has developed a breakthrough with Cordyline something "distinctively different" from all other selections. This was not your normal 'cabbage tree' type, but a remarkable new basal branching plant that had a completely different form compared to existing varieties, and was a stunning new garden plant.

It was clear from the start that Cordyline 'Red Fountain' was completely different from any other Cordyline.

Structured breeding programme

Here's some background in Mark Jury's own words. "Cordyline 'Red Fountain' (also known as 'Festival Burgundy' in the Northern Hemisphere) was no chance seedling or lucky break. It was part of a structured breeding programme which spanned decades and three different genera in search of a good red clumping plant with long, spear shaped foliage.

My late father, Felix Jury, started with New Zealand Phormiums. However, there were issues with the foliage in our humid climate. In a combined breeding and trialing effort done over 20 years, my father and I worked together on Astelias before we decided that no matter how good the plants were, they lacked the vigour and reliability to make them a commercial success. Working to see if he could get a similar plant from native Cordylines was new territory." Mark continued, "This was achieved over time using a complex mix of different species: C. banksii x pumilio x australis with the mother plant being compact and a deep red form of banksii hybrid.

Distinctively different

It was clear from the start that Cordyline 'Red Fountain' was completely different from any other Cordyline. Mark: "My father gave me the seed from his Cordyline crosses and I have subsequently continued breeding Cordylines. 'Red Fountain' remains a one-off amongst the thousands I have raised. To protect our interests we applied for and received the Plant Variety Rights in New Zealand and the Plant Breeder's Rights and patents in various overseas countries." Because it was such a different looking plant, there was a great deal of interest internationally. "Yes it was "distinctively different". However, its uniqueness also required new marketing approaches because it did not slip readily into any existing plant grouping that plant buyers knew. It was proving a commercial success," Mark said.

Generic copy

Now this is where the story gets interesting. In 2010, New Zealand nurseryman, Malcolm Woolmore / Kiwi Flora, applied for Plant Variety Rights here in NZ and PBR internationally on Cordyline 'Roma 06'. "We were confident that the integrity of the PVR system would protect our intellectual property," recalled Mark. He added, "After all, his Cordyline didn't look any different to 'Red Fountain' with its unique basal branching habit. We have plants of his in the nursery here and have yet to meet anyone who can tell it apart from our variety. It looks identical and it performs identically. Roma 06 looked like a generic copy and an attempt to cash in on an established international market created by 'Red Fountain'."

Minor variation

In the official PVR comparison trials, it was difficult to tell the varieties apart because the plants look so much alike. "There were some discussions with the NZ PVR office about extending the trial period beyond 2 years. In the end, the examiner took 8 sample leaves from the two varieties in question and reported that the petiole length was nominally different between the 2 varieties. We were stunned when the PVR office then granted Roma 06 protection, based on this minor variation in averaged petiole length alone, which is insignificant to the appearance of the plant and invisible to most professionals and, we believe, to the marketplace. And that these rights were granted based on the measurement of a mere eight

by Anthony Tesselaar

Left to right, Justin Cartmel from the Tesselaar office and Grant Eyres from Growing Spectrum nursery in New Zealand where the official PVR trials were held.

leaves selected from each variety." When the examiner documented this, he admitted that it was not possible to tell the varieties apart when the leaves were mixed. "It seemed beyond belief that this decision could be based on a mere eight leaves of each variety and - when mixed together - could not be separated visually by the examiners. Even before the original decision was announced, we requested a randomised blind test. Our request, repeated on several occasions throughout the whole assessment and appeals process, was ignored. We were equally shocked when the appeal was carried out by the same examiner who made the original decision. Sadly, we were not surprised when he decided to affirm his original decision. That decision appears to be entirely the making of one individual, who is ignoring all objections and bypassing any expert advice," outlined Mark.

Where to go from here?

When asked where to go from here, Mark said, "The result is that we no longer have any confidence in the integrity or value of plant breeders' rights in New Zealand. Over time we will review other PVRs that we hold, given that we are apparently paying only for a marketing tool and not for protection of our intellectual property or a consistent and transparent examination process. It may affect our decision to release new plants on the local market in the future if we think that a commercial competitor with the backing of the New Zealand Plant Variety Rights Office may be able to raise a near identical copy and claim that it as unique. As a professional plant breeder, with decades of experience and an extensive breeding programme that is entirely self-funded, I feel betrayed at the failure of the system, which offers no protection and is ready to award equal rights to a commercial competitor, taking advantage of the work done by my father, by myself and by our international agents".

Recognisable rights

From my own viewpoint. If PVR/PBR protection is to grant (recognisable) rights, it must therefore ensure that, if there is an infringement and the case has to go to judicial court, the plant differences must be easily identified. We have now had two cases where both plants look visually identical, yet both have been granted rights.

Going forward, the industry has to have rules whereby a plant is given a PVR/PBR because it is "Distinctively Different" with an agreed minimal difference between key (not minor) characteristics, otherwise one has to seriously question the benefit of applying for PVR/PBR at all if the examination process is about finding nominal differences between plants as opposed to protecting breeders' existing Intellectual property rights.

In the recent Exotic Plants vs De Roose Plants in Belgium, the judge ruled in favour of the initial PVR rights holder as he said both plants morphologically looked the same and fined the breeders of the copy type variety.

This is most unfortunately a bad reflection on the examination process and the PVR/PBR system where the granting of protection to copy varieties displaying minimal difference of a minor characteristic negates the value of the protection these rights are supposed to enforce in the first instance.

Clearer guidelines are needed on what key characteristics are considered a minimum dimension that qualifies for differentiation and greater accountability and transparency for the examiners and respective offices when granting or refusing rights.

We are now seeing an increase in breeders who no longer wish to take out any PVR/PBR rights because of these issues and lack of protection. They are of the opinion that the current system only wants to make money for on-going applications but does not support innovations and the rights of the license holders. Let's hope that this direction can be changed before it is too late.

About the author

Anthony Tesselaar hails from Anthony Tesselaar International, an international project management company dealing in plants, horticultural research & development and strategic water management.
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European patent with unitary effect and Unified Patent Court

After 40 years of attempts, the European countries have succeeded in creating a patent system providing unitary protection on their territory and in setting up a simplified regime for the enforcement of patents. While unitary protection had been achieved for other Intellectual Property rights, in particular the CPVR and Community trademark, such protection regarding patents had failed until now.

by Thomas Bouvet and Laura Romestant

This goal has now been achieved with a "patent package" comprising:

- two regulations dated 17 December 2012, implementing enhanced cooperation in the area of the creation of unitary patent protection;
- the agreement on a Unified Patent Court.

European patent with unitary effect

On 17 December 2012, the European Parliament approved Regulation (EU) No. 1257/2012 creating European patent with unitary effect (the "unitary patent") and Regulation (EU) No. 1260/2012 on the applicable translation arrangements for unitary patents. These regulations were adopted under the procedure of enhanced cooperation between 25 EU member states (all the states except Spain and Italy).

The unitary patent is a European patent granted by the EPO under the existing provisions of the European Patent Convention, to which the patent proprietor decides to give the unitary effect on the territory of the participating states. The patentability requirements of the unitary patent are therefore those provided for in the EPC, which notably contains exclusion for plant varieties and specific provisions for biotechnological inventions. In order to give unitary effect to the European patent, the latter must be granted with the same set of claims in respect of all the participating member states, and the patent holder must submit a request for unitary effect no later than one month after the mention of the grant is published.

Uniform protection

The unitary patent will provide uniform protection on the territories of all the participating member states. This protection (i.e. the exclusive rights conferred and the exceptions) is set by the law of the member state in which the applicant had his residence or principal place of business on the date of filing of the application or, if this condition is not satisfied, by the law of the state where the EPO has its headquarters. These national laws have not yet been completely harmonised, but they will be with the ratification of the Agreement on the Unified Patent Court that contains provisions on substantive law. The limitations provided for in the agreement include the breeder's exemption ("the rights conferred by a Unitary patent shall not extend to (…) the use of biological material for the purpose of breeding, or discovering and developing other plant varieties") and the farmer's exemption under the conditions of Article 14 of Regulation (EC) No. 2100/94. Therefore, the unitary patent will provide a further option for patent holders besides the existing national and European patent systems.

Financial advantage

The advantage of the unitary patent will be mainly of financial character, since the unitary patent conferring protection on the territory of the participating member states will cost less than requesting European patents in the same states; the exact cost has not been determined yet, but it will probably amount to that of seven or eight national designations. The unitary patent will also reduce translation costs as the patent granted in the language of the EPO will not need to be translated. Only during a transitional period would the unitary patent have to be translated, into English (if granted in French or German), or into another language of the Union (if granted in English).

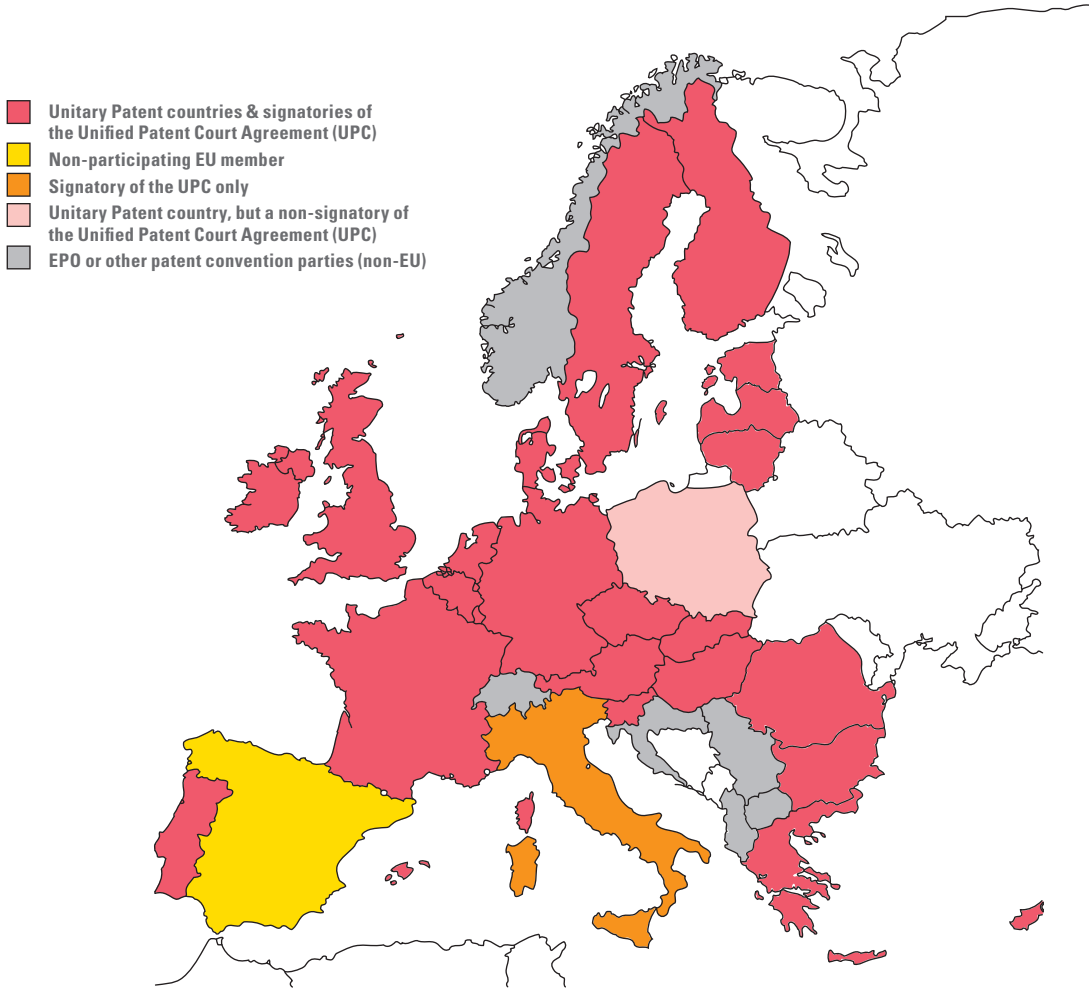
The two regulations entered into force on 20th January 2013, but they will become valid on 1st January 2014, or from the date of entry into force of the Agreement on a Unified Patent Court, whichever is the latest.

Unified Patent Court

On 19 February 2013, the Agreement on a Unified Patent Court ("UPC") was signed by 25 EU member states (all states except Poland and Spain). The aim of this agreement is to establish a unified patent litigation system allowing a simplified and less expensive litigation and to improve consistency in case-law and therefore legal certainty. It also aims to improve cost-effectiveness for patent proprietors. The purpose is to depart from the existing system in which patent litigation takes place at the national level and often requires parallel proceedings, which may have contradictory outcomes.

The UPC will have exclusive jurisdiction to decide on patent disputes for unitary patents, for ordinary European patents (for which no unitary effect has been requested) and European patent applications. Decisions of the UPC will have effect on the territory of the participating member states in which the European patent provides its effect.

The UPC will comprise a Court of



First Instance composed of:

- a central division having its seat in Paris but having sections in London (for patents in the fields of chemistry and human necessities) and Munich (for patents relating to engineering technologies);
- a local division in any contracting member state wishing to host such division (additional local divisions - maximum 4 - can be created depending on the number of cases handled each year);
- possible regional divisions set up by two or more contracting member states willing to pool their resources.

The UPC will also comprise a Court of Appeal located in Luxembourg.

The agreement contains detailed rules regarding the jurisdiction of the UPC divisions which can be summarised as follows:

- actions for patent revocation (as main actions) and declaration of non-infringement will be within the jurisdiction of the central division;
- patent infringement actions can be initiated upon the claimant's choice:
  - before the local or regional divisions of the contracting state in which the defendant is located or, if the defendant is not located in a contracting state, or if that state has no local or regional division, before the central division;
  - before the local or regional division of the place of infringement or, if the contracting state does not host such division, before the central division.

Forum shopping

The agreement thus allows for considerable forum shopping as the patent holder will be free to choose the division before which he wants to initiate the proceedings. Such choice will certainly include (i) language considerations (proceedings before the central division will be in the language of the patent and proceedings before local divisions will be in the local language) (ii) the average speed of the proceedings, (iii) the court structure (divisions will all comprise legally and technically qualified judges but their number will differ depending on the divisions), and (iv) the case law and win-rate of the divisions.

The agreement will enter into force after it is ratified by at least 13 participating member states, including France, Germany and the UK. During the transitional period of seven years after its entry into force, national courts will retain jurisdiction for actions regarding European patents. During this transitional period, the right holders can opt out from the exclusive jurisdiction of the UPC; unless an action has already been brought before a national court, the patent holders are entitled to withdraw their opt-out at any moment.

This "patent package" will probably enter into force in 2014 or 2015. It will then be up to the users to make it a success. |||

About the authors

Thomas Bouvet is an attorney-at-law specialized in patent and plant breeder's rights litigation. He is a partner of Véron & Associés a French law firm whose activity is entirely devoted to patent litigation. Laura Romestant is a trainee working for the same law firm.

PBR topsy-turvy - how UPOV and its members turn the system upside down

Today, the UPOV Plant Breeders' Rights system is the most important IP-system for the protection of plant varieties. In order to be effective, it should be clear and provide for sufficiently broad protection. A close look at the text of the UPOV Act of 1991 shows the current discrepancies between a well-written text and its insufficient implementation.

by Dr. Edgar Krieger

What a nice Sunday. The sun is shining, the lawn is mowed, bees buzzing inbetween flowers, time to relax, time to read the UPOV 1991 Act.

Everything's just super?

If one takes a quick look into the UPOV 1991 Act, one could come to a pleasant conclusion: the UPOV PBR system is straight-forward, easy and grants a truly exclusive right. If a variety is not clearly distinguishable from a protected variety, it must not be commercialised without the authorisation of the title holder. An EDV (Essentially Derived Variety) of a protected variety must not be commercialised either, without the authorisation of the title holder. Everybody can breed with a protected variety, but if he obtains one of the varieties mentioned before, he is not allowed to commercialise it without the authorisation of the title holder.
Everything's just super!? Not entirely. Although it appears that the text of the 1991 Act is well-written, its current practical application leaves wide gaps.
According to Article 14 (5) of the UPOV 1991Act the exclusive right of the title holder to commercialise his protected variety comprises also (i) varieties that are essentially derived from the protected variety, (ii) varieties that are not clearly distinguishable from the protected variety and (iii) varieties whose production requires the repeated use of the protected variety. This requires some deeper analysis.

Varieties that are not clearly distinguishable from the protected variety

Let´s start with varieties that are not clearly distinguishable from the protected variety. This extension of protection is rather new; it has only been incorporated into the UPOV system in the 1991 Act.
In its Green Paper of 2001 CIOPORA expressed its appreciation about this extension of protection manifested in Article 14 (5) (ii) and expressed its hope that this Article corrects the existing loophole in regard to 'cosmetic breeding'. As a precondition to the closing of this loophole CIOPORA mentioned: "These new provisions oblige the authorities in charge of the examination of distinctness to be more rigorous when evaluating the minimum distances between varieties for the grant of a title of protection."
However, in practice it turns out that the inclusion of Article 14 (5) (ii) does not keep its promises to better protect existing protected varieties against cosmetic breeding: in today´s reality the provision of Article 14 (5) (ii) of the UPOV 1991 Act is devoid of meaning. In today´s reality even a very small difference between two varieties makes the varieties clearly distinguishable in the eyes of the examination officers. Based on a purely botanical approach, all characteristics of a species are considered to be equally essential, and no differentiation is

Illustration by Néstor Morales Flores

made between characteristics that are important or unimportant for the exploitation of a variety. As a consequence, even a difference in one irrelevant characteristic can make a variety clearly distinguishable from another variety in the eyes of the examination officers. This narrowing of the distance between varieties is supported by UPOV, by allowing e.g. random blind tests if doubts exist over the distinctness of two varieties.
This pure botanical approach runs contrary to the legal character of Intellectual Property protection and devaluates the requirement of "clearly distinguishable" to a sole measurement of a difference in the meaning of Article 1 (vi) of the UPOV 1991 Act (definition of variety). As a result, the initial improvement of the UPOV 1991 Act compared to the UPOV 1961 and 1978 Act, aiming at a better control of "varieties that are not clearly distinguishable from the protected variety" has been impeded by this botanical approach.

Illustration by Néstor Morales Flores

If there is 'doubt', there is no clarity

In order to revitalise the protection against cosmetic breeding, the requirement "clearly distinguishable" should be seen as an evaluative requirement in the future and should not end in a simple search of a botanical difference. Additionally, the requirement "clearly distinguishable" should be assessed on characteristics important for the crop concerned and the test-guidelines should determine for each characteristic whether it is considered "important" for the determination of "clearly distinguishable". Differences in unimportant characteristics should not lead to a "clearly distinguishable" variety. The details should be discussed and agreed upon by breeders. In order to be "clearly distinguishable", the distance between two varieties in regard to their important characteristics should be sufficiently broad. Varieties with the same note in the UPOV test-guideline for a given characteristic should not be considered to be clearly distinguishable with respect to that characteristic.

The possibility to search for a difference in a subsequent growing trial, as it is foreseen in chapter 5.2.3.2.4 of UPOV TGP/9 in my opinion should be eliminated. Also, the possibility of random "blind" testing according to chapter 6.4 of UPOV TGP/9 in case of doubts over the distinctness of a candidate variety must in my view be eliminated. Common sense already says that in case of doubt over distinctness, the candidate variety cannot be considered to be clearly distinguishable from the reference variety. 'Doubt' and 'clearly' just do not fit together.

Essentially Derived Varieties

Although already in place for 20 years, the EDV concept still causes disputes and discussions about its meaning and purpose and about its scope. The main reason is the unclear language of the EDV provision and the erroneous entanglement of dependency and plagiarism.
Mutants and GMO – if clearly distinguishable from the Initial Variety – need to be considered to be EDV irrespective of the number of phenotypic differences in comparison to the Initial Variety, because they are completely derived from their Initial Variety and all differences to the Initial Variety result from the act of derivation. However, there are some that want to limit the EDV concept to varieties, which can be distinguished from the Initial Variety by a very limited number of characteristics ("typically by one"). Such interpretation limits the EDV concept as far as even possible. Taking into consideration that an EDV by definition must be clearly distinguishable from the Initial Variety, which requires at least a difference in one characteristic (even under the infinitesimal minimum distances currently applied by UPOV and the examination offices of its member countries) under such interpretation only varieties which have exactly one difference compared to their Initial Variety could be considered to be an EDV – a contradictory and useless approach.
In fact, the entanglement of dependency and plagiarism was and is a mistake in the conception – or interpretation – of the EDV provision. Plagiarism is not a question

of derivation or dependency, but rather a question of Minimum Distance and direct infringement. If a variety in its phenotype is almost identical (not clearly distinguishable) to a protected variety, its commercialisation is a direct infringement, irrespective of whether it is (essentially) derived from the protected variety or not.
In vegetatively reproduced ornamental and fruit varieties it would be sufficient for the EDV concept to establish dependency for each variety which is derived from one variety only, such as mutants and GMO, irrespective of the degree of the phenotypic similarity between the dependent and the Initial Variety. Such approach would immediately bring clarity into the EDV concept and would allow the breeders to effectively enforce the PBR titles of their Initial Varieties.

Groundbreaking innovations and features

In regard to a true exclusive right, one more aspect needs to be addressed. In recent years, more and more varieties which contain innovative, unique, groundbreaking features such as double flowering, winter-hardiness or permanent flowering are being bred. In order to develop such groundbreaking varieties, breeders devote a very significant amount of time and money as well as creativity and innovative capacity. However, such varieties are not effectively protected by the current PBR system. First of all, because of the breeders´ exemption, every competitor can use the groundbreaking variety in his breeding programme and can obtain a variety which, although being clearly distinguishable (even under a strict application of the requirements), reproduces the groundbreaking feature. Additionally, such groundbreaking feature(s) can be developed independently from the protected initial variety, which in the end has the same negative effect for the commercial success of the first variety containing this feature.
In the 2012 edition of CIOPORA Chronicle I already wrote that groundbreaking varieties deserve better protection. The question is not whether we need such protection, but how far we need to go with the protection and which is the best system to protect them? Does the huge investment in a groundbreaking variety justify that all subsequent varieties, which reproduce the groundbreaking feature(s), fall under the scope of the original variety, irrespective of their origin? Or should the protection only cover varieties that reproduce the groundbreaking feature(s) and that are derived from the original variety?
One can also think about solving a part of this issue with Patent protection, which is per se designed to cover traits rather than a genomic composition. Both might be possible, but if such groundbreaking features could be covered by the Plant Breeders´ Rights system, which is the tailor-made system for varieties, it would limit the confusion created by mixing two protection systems, and would reduce costs for breeders.

Illustration by Néstor Morales Flores

Finally, I succeeded to cross a banana and a melon!

Breed with everything you want, but be aware of what you breed

According to Article 15 (1) (iii) of the UPOV 1991 Act, the breeder's right shall not extend to acts done for the purpose of breeding other varieties, and, except where the provisions of Article 14 (5) apply, acts referred to in Article 14 (1) to (4) in respect of such other varieties.
The breeders´ exemption as imbedded in the UPOV PBR system since its beginning is a unique feature in IP protection systems.
The current breeders´ exemption consists of two components:

- The free use of protected plant material for further breeding is one component
- The limited commercialisation of the new breeding result is the other one.

The free use of protected plant material for further breeding is the component of the breeders´ exemption that has been kept unchanged since the beginning of the UPOV system.

What has been changed in the course of time is the limitation of the commercialisation of the breeding result. In the UPOV 1961 Act and 1978 Act (Article 5.3) the breeders´ exemption was limited only when the repeated use of the new variety is necessary for the commercial production of another variety. In comparison, Article 15 (1) (iii) in combination with Article 14 (5) of the UPOV 1991 Act was meant to limit the breeders´ exemption to a greater extent - at least on paper - by prohibiting the free commercialisation of three groups of varieties:

(i) varieties that are essentially derived from the protected variety (where the protected variety is not itself an essentially derived variety),
(ii) varieties that are not clearly distinguishable from the protected variety and
(iii) varieties whose production requires the repeated use of the protected variety.

From a systematical point of view the reference in Article 15 (1) (iii) to the varieties listed in Article 14 (5) (ii) and (iii) is incorrect: Only varieties that are essentially derived from the protected variety are necessarily the result of breeding with the protected variety. Varieties that are not clearly distinguishable from the protected variety can also be developed by using varieties other than the protected one and varieties whose production requires the repeated use of the protected variety are usually the result of sexual reproduction of plants, but not of breeding work. The main reason for this systematical error is obviously that the UPOV on one hand wanted to maintain the "traditional" possibility to commercialise varieties resulting from breeding with a protected variety, while on the other hand it wanted to further limit the breeders´ exemption by prohibiting the commercialisation of two more types of varieties.

In order to adapt the PBR system to the current environment in modern breeding and to make it suitable for the challenges in the future and in order to have a systematically correct structure, the breeders´ exemption should be re-structured and fine-tuned.

For the sake of fostering innovation, the free use of protected plant material for further breeding should, in my opinion, be kept, provided that the commercialisation of the breeding results does not weaken the exclusive right in the protected innovation. The change in the UPOV system would therefore relate to the commercialisation part of the breeders exemption. It simply should be deleted, so that the future breeders´ exemption would read: "The breeder's right shall not extend to acts done for the purpose of breeding other varieties."

This means that the commercialisation of any variety, which falls under the scope of a protected variety, shall require the authorisation of the title holder of the protected variety. According to what has been said above, such varieties would be:

- varieties that are not clearly distinguishable from the protected variety
- varieties that are essentially derived from the protected variety
- varieties that reproduce the groundbreaking feature(s) of the protected variety
- varieties whose production requires the repeated use of the protected variety.

In other words: the future breeders´ exemption should only contain the free use of protected material for further breeding, but no commercialisation anymore. Consequence: If a new variety, which results from any kind of breeding (i.e. crossing and selection, mutating, genetic modification etc.), falls under the scope of a protected variety (not only of the variety that has been used for breeding the new variety), it must not be commercialised without the authorisation of the title holder of the protected variety. The concept is similar to the "breeders´ exemption" in the new Unitary Patent in the EU or in the Patent law of Germany and France. And in fact, this change of the breeders´ exemption does not bring a major change to the current situation (except for groundbreaking features), because already now EDVs, varieties not clearly distinguishable and varieties requiring repeated use, are blocked at least on paper, from commercialisation.

In a nutshell

It doesn´t require witchcraft to strengthen the exclusive right of the title-holder. We can even keep the free use of protected varieties for further breeding in the PBR system, but we need

- to restore the concept of varieties that are not clearly distinguishable from the protected variety, that is to say that we need to broaden its meaning by establishing a sufficiently broad minimum distance between varieties;
- to clarify the EDV concept and implement it in a sufficiently broad way, which allows the breeder of the Initial Variety to control mutations and GMO of his protected variety;
- to install a system that protects groundbreaking innovations.

So – everything solved – what a nice Sunday.

About the author

Dr Edgar Krieger has extensive experience in the field of Intellectual Property Protection for plant innovation. He has been executing the position of Secretary General of CIOPORA since 2004. Previously, Dr Krieger worked as a lawyer at an international law firm specialising in IP protection, and particularly in Plant Breeder's Rights, advising agricultural breeders in several hundred court cases up to the European Court of Justice. Dr Krieger has completed his doctoral dissertation on the topic "Farmers' Exemption in Germany" at the Philipp University of Marburg.

Plant breeders' rights are not an empty box and should therefore not be treated as one. This article aims at providing a riposte to common misconceptions.

DNA testing (credits: Naktuinbouw).

Belgian discovery rules give Plant Variety Rights teeth

by Philippe de Jong

Plant breeders spend vast amounts of money, time and effort in creating new varieties. They then usually spend almost as much money, time and effort on obtaining plant variety right certificates from either the CPVO or national authorities in different countries around the world. Yet they are only rarely seen in court. Admittedly, conducting litigation and paying lawyers is not their core business, nor should it be. But they should not be put off from going to court by incorrect perceptions.

Ostrich approach

One of the most common of these incorrect perceptions is, that convincing a court that someone else is infringing their plant variety rights is as easy as convincing a vegetarian that meat is good for him, in other words impossible. This feeling is not just triggered by the fact that the products covered by the rights are living plants and therefore, by their very nature, difficult to define or describe. It is furthermore felt that, since the only place the claimant can gather evidence from is his competitor's highly-secured greenhouses, proving infringement cannot be impossible. With that perception in mind, plant breeders have already too often preferred to adopt the ostrich approach and bury their heads in the sand, hoping the infringement comes to nothing, rather than confronting the alleged infringer. Obviously this is not what the legislation, that created plant variety rights, intended.

Genotype and fenotype

In broad terms, if a breeder comes across plants with characteristics suspiciously close to those of his protected variety, he will – to begin with – normally want to have their DNA tested to obtain a unique DNA fingerprint. This can already provide the breeder with an indication that the plant is either his protected variety, or belongs to an essentially derived variety. If he acts quickly, the DNA fingerprint may in some jurisdictions be sufficient evidence to obtain a preliminary injunction against the other plant breeder, based on the presumption that the genetic similarity is too high to be coincidental. But that is, of course, usually not enough. The current plant variety rights protection system is based on phenotypes, so the claimant has to have the allegedly infringing plant's morphological or physiological characteristics analysed, as only this type of analysis will allow the court to grant a permanent injunction. Finally, the claimant needs to obtain information about the origin of the plants and the geographical scope of their distribution and sales, if he wants to claim damages for lost sales and profits.

Discovery procedure

But how can the average plant breeder gather all this information? There are essentially two ways. Either the breeder commissions his own DNA fingerprinting and botanical analysis and makes his

Molecular marker technology.

own educated guess about the plants' distribution and sales and the profits made by the alleged infringer, but such "home-made" evidence is unlikely to be accepted by a court. Or he can use the efficient discovery mechanisms laid down by law. For example, back in 2004, in the so-called "Enforcement Directive", the European Union set up an intellectual property ("IP") framework for rights-owners, including plant breeders, to collect evidence of alleged infringements and to enforce their rights against the infringers based on that evidence. This framework has now been transposed in the national laws of the EU Member States. One of its key tools for plant breeders, who suspect that their IP rights have been infringed, is the right to apply to the courts for measures to preserve evidence of alleged infringements and to order suspects to provide information on the origin and distribution networks of the plants concerned. This tool was largely based on the Belgian "discovery procedure" ("saisie contrefaçon" in French and "beslag inzake namaak" or "BIN" in Dutch).

Over the years, this has proved to be the most powerful and cost-efficient means of enforcement available to IP rights holders who are trying to enforce their rights. A recent case law has confirmed that the procedure is not only used by holders of "traditional" IP rights, such as trademarks or patents, but increasingly also by plant variety right holders.

Not just a Belgian affair

This Belgian discovery is not just a Belgian affair. It can be (and is frequently) used by both Belgian and foreign breeders and it can be applied for on the basis of a Belgian, foreign or European title to discover infringements across the EU. The threshold for obtaining a discovery measure has been set fairly low: all the claimant needs are "indications" of infringement and a "prima facie" valid plant variety right (which is presumed). Once these conditions have been met, the courts can order the discovery procedure to be implemented to cover "any items, elements, documents or methods which may serve to establish the alleged infringement as well as its origin, destination and scope". Each of these elements will be described by a court-appointed expert, or two or more experts in complex cases. The expert's findings are submitted to the court in a detailed report, usually within one or two months, and copies are sent to the parties. The expert's independence means the report provides a solid basis for further legal action, unlike the "home-made" evidence mentioned above.

The discovery procedure's value to plant breeders was recently demonstrated in the 'Calypso' (pictured) case between Exotic Plant and Deroose Plants.

Bromeliads

The discovery procedure's value to plant breeders was recently demonstrated in the Calypso case between Exotic Plant and Deroose Plants. Exotic Plant held a Belgian and a Dutch plant variety right for the bromeliad variety 'Calypso'. It came across similar bromeliads, sold in Belgium and the Netherlands as 'Starlight' and 'Catherine' by Deroose Plants.

It claimed before a Belgian court that these two varieties infringed its Belgian and Dutch plant variety rights for 'Calypso' and the court ordered a discovery procedure to be conducted by two experts. The first expert, a bromeliad specialist from Naktuinbouw, was asked to provide DNA fingerprints for 'Starlight' and 'Catherine' and morphological descriptions of the plants. The second expert, an accountant and IT specialist was asked to estimate the number of plants produced and sold by Deroose Plants in Belgium and abroad. The first expert's report showed that the plants of all three varieties were morphologically as good as identical, and thus allowed to conclude that 'Starlight' and 'Catherine' infringed Exotic Plant's 'Calypso' plant variety right. The court issued an injunction ordering Deroose Plants to withdraw all 'Starlight' and 'Catherine' plants from sale in Belgium and the Netherlands and to destroy any remaining propagating material. The court then ordered Deroose Plants to pay Exotic Plant damages, based on the figures in the second expert report. |||

About the author

Philippe de Jong is a lawyer in the Intellectual Property and Life Sciences department at the ALTIUS law firm in Brussels. He has been a member of the Brussels bar since 2002, and specialises in patents, plant variety rights and parallel import litigation. He also advises clients on the regulatory framework for medicinal products and plants, including GMOs. He worked as a consultant for the CPVO and has represented a large number of innovating companies before the Belgian and European courts. He is also an active member of CIOPORA.

Colombia's PBR system faces unsolved problems

Since 1995, when Colombia became a UPOV 1978 Act member, the Colombian Agricultural Institute (ICA) has received a total of 1786 applications from all over the world in all the fields of plant breeding. Out of these applications, a total of 1140 certificates of protection were issued by December 2012.

by Andres Rincon

A closer look at the numbers shows that asexually reproduced varieties, especially ornamentals, have benefited greatly from the system. This is quite plausible as 44% of the total applications originate from the Netherlands and 47% of the grants belong to rose varieties, followed by 14% Chrysanthemum, 11% carnation, 11% Alstroemeria and only 20% for other varieties.

Unsolved challenge

Although the system has proven to be effective in granting Plant Breeder Rights (PBR), an unsolved challenge remains with the international community, which is to demonstrate that the system provides adequate laws and regulations that are capable of meeting the demands of breeders as stated in the UPOV 1991 Act.

With these needs in mind, the Colombian government has been trying to adhere to the UPOV 1991 Convention for several years, but is still facing strong political resistance from sectors opposing the broadening of the IP standards in socially sensible areas such as pharmaceuticals and agriculture. The latest attempt to adhere to the '91 standard was made on April 2012, when the Congress passed Bill 1518 adhering to the '91 Act of UPOV in the framework of implementing legal commitments acquired under the Free Trade Agreement with the US government. This law, however, has recently been declared unconstitutional by the Colombian Constitutional Court, which holds that the approval process violated the fundamental rights of indigenous and tribal communities. These latter should have been consulted by the government before the passing of the bill as the UPOV 1991 Act standard may affect those communities' agricultural practices and ancestral knowledge. The government intends to proceed with the bill, but needs to develop a strategy to comply with the consultation ordered by the Court.

Measures of protection

Despite not being able to adhere to the UPOV 1991 Act yet, Colombia has managed to implement the '91 Act minimum standards by providing breeders with (i) provisional protection between filing and granting; (ii) effective protection over Essentially Derived Varieties (EDVs); (iii) experimental use exception; (iv) farmer's privilege restricted to less than five hectares in addition to filing a report with ICA, and a marketing prohibition of the harvest material; and (v) a 25-year term of protection for vines, forest and fruit trees, and a 20-year term for other species.

Adhering to the UPOV 1991 standard, however, would allow the country to open the door for the implementation of even stronger legal measures regarding harvest materials, especially products that are manufactured with those harvest materials. But most importantly, adhering to the UPOV 1991 Act would provide the international community with the certainty of political commitment to maintain the highest minimum standards as agreed by all the UPOV 1991 Act member states.

ICA

Finally, to facilitate the enforcement of plant varieties in the country, the Colombian Congress passed Bill 1564 in 2012, providing the ICA with jurisdiction over infringement of PBR. This change in essence creates a PBR specialized court, providing the Instituto Colombiano Agropecuario ICA (the organisation that administers Colombia's Plant Variety Rights Regime) with judicial control of the PBR system, something which in principle will solve the historical problems of the system associated with the lack of technical knowledge of the judicial authorities when enforcing PBR. The challenge is now in the hands of the ICA, bearing in mind that it is a small office with very limited human and financial resources. These problems would require immediate attention from the Colombian government in order to guarantee the success of this new function.

Parallel to the implementation of the new judicial functions of the ICA, the government is attempting to implement a socialisation programme for the existing indigenous communities, which delivers the (relatively small) changes that come from complying with the UPOV 1991 Act. This means the outlook for the balance of the protection for plant innovation in Colombia is optimistic. However, it also implies an invitation to the international community and associations like CIOPORA to keep a vigilant eye on the country, with active lobbying highlighting the positive amendments brought to the UPOV Convention in the revised Act of 1991.

About the author

Andres Rincon is a Colombian Patent Attorney with broad experience in Intellectual Property. He holds a Masters Degree from the Max Planck Institute -Munich Intellectual Property Law Center-, and has a successful practice in the fields of plant breeding protection, and enforcement of intellectual property assets. He is now a Senior Associate at OlarteMoure, where he directs the Plant Breeding Protection Department and the Litigation Department of the firm.

The importance of plant breeders'rights (PBR) for marketing purposes cannot be underestimated.

Breeders play vital role in supply chain

by Jaap N. Kras

A company has in principal only two tools to sell its products. It has to offer the products at a cheaper price than its competitor or it has to sell a unique product. To conquer a position by being cheaper than your competitors is a dead end street with only losers at the end. Being unique or creating the impression of being unique (Coca Cola) is a better road to creating a stronger market position. Trademarks communicate the unique origin of a product, a patented product or breeder's right protected product is always unique, at least at the start, otherwise it would not be granted a patent or breeder's right in the first place.

Shortening the supply chain

What we know of modern markets is that production and consumption are coming closer and closer together. All the steps in between change and will be reduced to serving functions for the delivery of products from the producer to the consumer. Overall there's a tendency to streamline the market down to its basics.

As long as it is cheaper to collect and regroup the products from the growers before transporting, shipping, cooling and post harvesting them well, then this function will remain. But do we need an independent wholesaler, freight forwarder, transporter and warehouse provider to do that or could all these functions be performed by one company? And when and where does the process start?

Enormous time pressure

Today's wholesale companies are order driven: they start their work after receiving their orders. By working this way, the whole process comes under enormous time pressure especially as when working with perishables. This means that prices go up and the quality goes down as soon as flowers are cut and brought in the supply chain.

Breeders with their unique Intellectual Property Right (IPR) products go directly to retailers: a chain or a florist (group of florists), to understand the products the retailer wants to sell.

If we consider the product bought by a consumer, a final product, to be different from the raw product harvested by a producer, then the final product has to be produced somewhere. Basic and specialty products are produced by a florist whereas supermarket chain products are produced by the suppliers of the retailing industry; the bouquet makers. If a florist is the producer of the final product, the bouquet maker is the producer of the final product for the chains.

Know your market

The outcome of market research is a decisive factor in the role of the company in between the farmer and the last outlet. The first and most important thing breeders and growers must do is know their market. Products for the basic demand or the specialty demand differ structurally from products for the supermarkets. Breeders and growers have to be aware of that and concentrate on either the production for the florist or production for the supermarket. As a results growers have to differentiate themselves in the marketplace, make choices and concentrate on one process.

Service supply machine

We are on the edge of the next step. Breeders with their unique Intellectual Property Right (IPR) products go directly to retailers: a chain or a florist (group of florists), to understand the products the retailer wants to sell. Then they go together to farmers to produce the requested final products according to the wishes of the retailer and his consumers: numbers, qualities, and delivery dates.

The whole post harvesting process changes into a service supply machine for these specific segments: chains or florists. This process from breeder to consumer differs for the two main segments: supermarkets and florists. The differences regard the varieties, the size of the flowers, the vase life, the transportation and conditioning of the products through the supply chain and the marketing and price setting of the products by the retailers.

The retailer can concentrate on the sales and marketing of his products and, if necessary, on producing the final products himself for the basic need (florists) and the specialty need (parties). The breeder and the retailer should team up to manage the whole process with all the different choices and decisions an entrepreneur has to make. |||

About the author

Jaap Kras is an industry veteran and owner and publisher of FloraCulture Interantional.

Sometimes you have to be really quick and rigid when it comes to enforcement of PVRs. And then it is helpful if the law provides what you need and the court system is equipped to do what the law says.

Hydrangeas in a PVR squeeze

by Tjeerd Overdijk and Maarten Leune*

In times of economic downturn, breeders around the world are increasingly confronted with growers who are not respecting breeders' rights (PVRs). We also see an increase of bankruptcies of licensed growers. And if there are hardly any assets to be liquidated, except a number of greenhouses and/or fields with plants, trustees/curators in a bankruptcy are not always respectful towards PVRs, which they tend to see as nasty obstacles for maximising the proceeds of a liquidation.

Hydrangea case

An example of the situation described above is the Hydrangea case that occurred in the Netherlands in the autumn of 2012.
The Hydrangea Breeders' Association ("HBA") is a well-known Dutch breeder of a number of Hydrangea varieties, such as 'Bela', 'Red Beauty', 'Hot Red' and a variety with trade mark EARLY® BLUE . In the course of 2011, HBA was confronted with a non-licensed grower M, who was believed to have propagated a vast number of Hydrangea varieties without having any kind of license. The illegal propagation had been discovered through regular checks and greenhouse/field visits made by Royalty Administration International (RAI).
After a civil seizure of illegal plants RAI/HBA was able to reach a settlement with M for the 2011 infringements.

Hard to identify

In the course of 2012, it appeared that M had again undertaken acts of illegal propagation. But M was not cooperative and unwilling to inform RAI about his activities, the varieties, the locations and the size of his operation. By tracing and active inspection/investigation, RAI discovered that M had plant material at several locations in the area. This time M's principal had put up a screen in the form of a new company, Botensia B.V. Even without paying royalties this company went bankrupt in August 2012.
The trustee in the bankruptcy was left with rented greenhouses and fields with an enormous number of Hydrangea cuttings, trays with rooted cuttings, several sizes of potted plants and mother plants. It was late autumn and hard to identify because the plants were returning to hibernation and losing the colour of their leaves. In a greenhouse in 's-Gravendeel, the Netherlands, there were around one million Hydrangeas, including approximately 260,000 cuttings and 240,000 half-grown HBA varieties, and at five other locations were another million Hydrangeas, including approximately 300,000 plants of HBA varieties.

Auction

In early October it turned out that the trustee had hired a trading company to arrange the sell off the plants and this trading company then arranged for an auction to be held. It was clear that a large number of illegal plants would be offered for sale at the auction. The auction was already open for online bidding and the closing date of the auction was October 16, 2012, 2 pm.
We then decided to write a cease & desist letter to the trader and the auction advising them that selling HBA varieties at the auction would constitute an infringement of several PVRs of HBA. On Friday October 12 the trader responded that he was unaware of any PVRs as the trustee had never made mention of any.
The auction house referred the HBA claims to the seller and preferred to await instructions from the seller.

Precautionary measures

RAI/HBA went to the viewing day in 's-Gravendeel on the following Monday, October 15, to inspect the plants that were being offered at the auction. The auction house added that it did not yet see a need to cancel or suspend the auction in order to have time to investigate the claims of HBA. In the meantime, the auction clock was ticking until its closing time on Tuesday, 16 October, 2 pm.
We then decided that we could not wait for the required cooperation of the trader and the auction and that we had to take some precautionary measures. We were looking at action to effectively prevent the plants of the HBA varieties to be sold at the auction.
At that moment there were basically two options. Either we could organise a civil seizure of the infringing plants that were being offered for sale at the auction; meaning, however, that we had to obtain permission from the court to undertake the seizure and we had to find a bailiff who would be able to carry out the seizure.
A complicating factor here was that the plants were simply being offered as Hydrangeas without any mention of variety names.
Another option was applying for an ex parte court[1] order which would prevent the selling of plant materials that infringed the PVRs of HBA.
We basically only had the Monday to make the necessary arrangements and you never know how long the courts will need to give a ruling on an application for provisional measures. Given the short time left we decided to walk both paths and see which of the two would give the first and the best opportunities. A request for seizure had to be filed in the District Court of Dordrecht.

EARLY® BLUE.

EARLY® ROSA.

Hydrangea 'Hot Red'.

A request for an ex parte prohibition order was to be filed at the Hague District Court, because that court is exclusively competent for PVR matters

Knowledge sharing

An interesting factor is that there is a clear trend for more cooperation and knowledge sharing between District Courts and as a result both the seizure request and the ex parte request landed on the desk of the same judge at the Hague District Court. Therefore we were able to influence the timing to some extent and we were able to persuade the judge to issue the requested ex parte order on the very same Monday, 15th of October, well before the close of the auction. In the meantime, at the viewing day of the auction, RAI/HBA had identified and labeled all the varieties in each of a total of 200 different lots, to determine the exact size of the infringement. In the order both the trader and the auction were told to desist from infringing the PVRs of HBA and more specifically to sell, trade, deliver or keep in stock plant material of the protected Hydrangea varieties[2].

Penalty threat

As for the auction, the judge ruled that it was not plausible that the auction was expected to directly infringe the PVRs of HBA, but that it was sufficiently plausible that the auction would be providing services as an intermediary, which would be instrumental for infringements of the PVRs of HBA, against which special measures are available[3].
A breach of the order carried a penalty of €10,000 per event of breach. As a result the plants to be sold at the auction were subject to an effective PVR-squeeze: neither the trader, nor the auction could be certain that they would not be selling plant material that would make them liable for the penalty imposed, so the auction of the HBA varieties could only take place with the consent of RAI/HBA.

Favourable solution

With the order in hand, RAI was able to negotiate a favourable solution for the auction: all auction lots with plant material of HBA varieties would be supplemented with PVR- and royalty information and the auction house would be instrumental in collecting all royalties due from the buyers at the auction, increased with a mark-up to cover the legal and other additional costs incurred. RAI received all buyers' information per sold lot of HBA varieties.
The owners of the other five locations were approached by RAI directly and paid the royalty and penalty for the HBA varieties.

Happy end

The ending was a really happy one. RAI collected royalties in respect of illegal plants and reimbursement of all additional costs. RAI was also able to trace the purchased lots and informed the buyers that they were not allowed to propagate the purchased plant material without a license agreement. HBA exercised its rights, tackled illegal propagation and received the royalty. The trader and the trustee trader were able to sell the plants. The auction had its auction. The buyers at the auction were able to buy Hydrangeas for a good price, cleared from further PVR claims and/or royalty. This case shows how important it is that the law and the legal system are well aligned. In the Netherlands, the breeders have the benefit of a solid legal system that is working well. We have efficient courts and experienced judges who are able and willing, if the need arises, to grant effective provisional measures on an urgent basis.
It also showed clearly that a good cooperation between license agent, breeder and lawyer can result in a fast and successful outcome of coordinated infringement action. |||

Overview of flowering Hydrangea seedlings (Photo credits: Guido Clamer of Clamer Informa).

1 'Ex parte' means an order which is given at the request of an applicant whereby the defendant is not heard upon the request.
2 A Dutch language version of the order has been published on two well-known Dutch I.P. blogs <www.ie-forum.nl> and <www.boek9.nl>. Search term 'hydrangea' and it will be on screen.
3 In accordance with provisions similar to Article 9 para 1 (a) of the Enforcement Directive 2004/48/EC.

About the authors

Tjeerd Overdijk is a lawyer and co-owner of Vondst Advocaten. Maarten Leune is managing director and co-owner of Royalty Administration International (RAI).

About relationships between growers and independent breeders and the role of agents.

The importance of communication in breeder-agent-grower relationships

by Graham Spencer

I am well-acquainted with the world of horticulture. I am both a qualified marketer and a grower with 15 years experience of getting my hands dirty. In the world of new product development for garden plants (my specialism), this combination gives me understanding of both the desires of the industry and consumer for new products, and the possibilities and limitations of plant breeding.

Quantify your needs

On one hand, growers wish for products that offer improved visual appeal and superior growing performance. On the other hand, plant breeders are limited by resources, limits of time and money, and limits of the gene pool available to them. At the same time, the end consumer has a desire for something that is new, but needs to be assured that it will provide value to them, either by giving them pleasure (colour, fragrance) or by solving a problem (low maintenance, difficult conditions). The result is a situation where breeders supply the best products that they have to growers who find that their needs are generally not being fully met. That assumes that growers have ever tried to quantify their needs and desires for new products. This is something that I believe few growers have ever done. How many growers are conducting organised research into the needs and desires of their customers? Do we know what garden centres want us to provide for them? Do garden centres know what their customers want to buy? Have we done any scanning to see what trends might be important in the future? Have we ever attempted to define "value"? Or, do we simply want to sell what we had last year, only a bit more?

Serendipity

In some genera, we see that some breeders are making concerted efforts to breed towards specific goals that promise improved value. This is largely limited to the genera and species for which there is already a considerable established market. Pelargonium, Petunia, Lavandula and Dianthus would be good examples.

But for many other genera, and there are thousands to choose from, breeding is largely undertaken on a small scale by enthusiasts, on an ad hoc basis by growers, or is even the simple product of serendipity; the interesting mutation spotted in a garden or nursery, the open-pollinated seedling that comes up beside the path.

Professional versus amateur breeders

For the professional breeder, there is a simple relationship. Understand what your customer (perhaps also your employer) desires and then steer your breeding programme towards it, working to convince your customer that what you have will meet their needs and be better than that of your competitors.

For the amateur breeder, the relationship is more complex. Firstly, they may not know who their customer is or might be. They will almost certainly only have limited understanding of what the customer might want. The customer themselves may not be familiar with the genus or species that the breeder is working with and will not have any perception of the value and benefits that the new plant might have.

In addition, there is the issue of personality. Amateur breeders are often very emotionally attached to the products of their breeding (professionals are a little more dispassionate in my experience). They can also often be far removed from the norms of the commercial environment. There's no HR manager here.

Agent

In such circumstances, the new plant needs an advocate, someone who will wave the flag and promote its benefits. Rarely is this person the breeder, as they will often only have limited connections to the wholesale trade. So this becomes the role the breeders' agent offers to the breeder; a knowledge of the trade, a long list of valuable contacts and an understanding of what is required and how to deliver it.

Equally, the grower also needs the agent to bring new varieties to their attention, often from outside the normal channels. Varieties that will provide commercial advantage. The agent can also provide an interface for the breeder that integrates more readily with the commercial environment.

Trust

Both the agent-breeder and agent-grower relationship are born out of

Phygelius seedlings.

(Photo credits: SelectaKlemm).

trust. The breeder needs an agent who will represent their interests to the best of their abilities and will ensure that they are not ripped-off. The grower needs the agent to honour his word, be honest about the qualities (and faults) of the plant, to be an effective conduit for communication and to ensure that the plant really is worthy of their time and resources.

Whilst the relationships are dependent on trust, it is also up to the agent to ensure that the correct legal protections (intellectual property) and contracts (trial agreements, licences) are all in place and are as robust as possible. Breeders and growers alike must understand the importance of effective protection of innovation, through patent, plant variety rights and even trademark. Without effective protection, the value of innovation is diminished. Then it becomes too easy for others to copy or reproduce the innovative plant variety without the breeder or their grower client being able to benefit or even recoup the cost of the innovation. For many breeders, even professionals, intellectual property and contracts are an area that is quite bewildering and not something they have sufficient knowledge of.

Communication

Communication is possibly the most important factor in these relationships. The breeder and grower need to exchange information openly and honestly. The breeder needs to make clear any known issues with their variety (disease resistance, propagation performance, mother stock qualities). Equally, the grower must return complete and full information to the breeder including comprehensive results from trials provided in a timely manner, plausible estimates for production and sales and truthful royalty reporting. The agent can act as a conduit for information, but also can work to keep the two main parties in line!

In some genera such as Pelargonium we see that some breeders are making concerted efforts to breed towards specific goals that promise improved value. This is largely limited to the genera and species for which there is already a considerable established market

Can breeders be more focused? I've heard it suggested recently that garden plant breeders have barely scratched the surface of what is possible. There are many species and even entire genera where very little controlled breeding has taken place. So it would be easy for breeders to wander aimlessly with their breeding programmes. But by communicating more effectively with customers and agents, it should be possible to begin directing efforts in a more focused and, ultimately, more profitable way. It is up to our industry to start to try to provide the information necessary for breeders to do that. Information about what growers want and what consumers want. In doing so, we will see new products coming forward that have added value for our businesses. |||

About the author

Graham Spencer is owner of Plants For Europe Limited, an independent plant breeders' agent, based in East Sussex, England. Plants For Europe has just celebrated its tenth birthday. For more information, see www.plantsforeurope.com

Has the technical examination under the Community Plant Variety system been twisted into a "botanical quest" for new varieties?

Clearly or just about distinguishable?

by Thomas Leidereiter

Under the Community Plant Variety Rights ("CPVR") regime, the largest sui generis system of protecting plant innovations was established in 1994. As a result, a single application can lead to an intellectual property ("IP") right that is valid and, theoretically, enforceable in all 27 member states of the European Union, which have a total population of more than 500 million.

CPVR applications

Over the past few years the market for horticultural products has remained more or less stable, yet the Community Plant Variety Office (CPVO) continues to receive up to 3,000 new CPVR applications each year. 60% of these applications originate from the ornamental and fruit sector. To me, it is logical that, for each new candidate variety to be able to get a reasonable share in the market or to even develop its own market, it should literally be 'new', i.e. sufficiently 'unique' or 'original' compared to the varieties already available on the market. Otherwise, all that variety can achieve is to saturate the market with similar products and, thereby, minimising the market share of each variety.

Daily routine

The current CPVR practice does not reflect those simple findings. Today, a new variety is already considered worthy of CPVR protection, as long as it shows a difference in the expression of one of its characteristics, provided that the difference is considered to be 'clear' by the CPVO. Taking a measured characteristic for example (e.g. width of the leaves): The difference is considered to be clear if it occurs in the same direction and is found at the so called 1% level[1] in two years of testing.

Breeders united in CIOPORA are well advised to exert their influence when it comes to defining commercially reasonable distances, new varieties will have to keep from the existing ones.

Another example of a 'clear difference' in today's practice can be seen in the picture: one variety has red; the other variety has green pedicels. Obviously, the difference is 'clear' in the sense that it can be seen - from underneath the plants. Still, the question is whether breeders want candidate varieties to be granted CPVR protection on the basis of such differences.

According to the law

Taking a closer look at the CPVR regulation (the 'Regulation')[2] reveals that it leaves plenty of scope for broad(er) distances between protected varieties. In fact, it seems as if the Regulation would be expressly calling for larger distances than those accepted today. Firstly, there is Art. 5(2) of the Regulation defining a variety, inter alia, as a plant grouping that "irrespective of whether the conditions for the grant of a plant variety right are fully met, can be … distinguished from any other plant grouping by the expression of at least one of the said characteristics".

Thus, simply to qualify as a variety there must be a difference in the expression of at least one characteristic allowing the variety to be distinguished from all existing varieties.

What then is called 'distinct' by the law? Art. 7(1) of the Regulation reads: "A variety shall be deemed to be distinct if it is clearly distinguishable by reference to the expression of the characteristics..." and, thereby, elevates the requirement of distinctness to an entirely different level.

Clear distinction

We see that not only should the difference allow for a "clear" distinction between the varieties. Unlike Art. 5(2) Regulation, which refers to at least one of the variety's characteris-

Another example of a 'clear difference' in today's practice can be seen in the picture: one variety has red; the other variety has green pedicels. Obviously, the difference is 'clear' in the sense that it can be seen – from underneath the plants. Still, the question is whether breeders want candidate varieties to be granted CPVR protection on the basis of such differences.

tics, the distinctness requirement of Art. 7(1) makes reference to the characteristics as a whole, not to one or more of the characteristics of the variety. Distinctness, by virtue of the law, shall be assessed taking into consideration the entire plant rather than assessing individual characteristics.
There are, however, voices claiming that there is no difference between Art. 5(2) and Art. 7(1) of the Regulation. Even **UPOV** seems to promote the idea of a clear botanical difference in one characteristic being sufficient to grant plant variety protection. However, the European legislator obviously had a different idea in mind, when drafting the definitions of 'variety' and 'distinctness': "whereas the term 'variety' shall be considered to mean an entity as traditionally and commonly understood by plant breeders… consequently that entity must be broader than that, which satisfies the conditions governing the grant of Community Plant Variety Rights in full…".[3]

In the future

A CPVR as an IP right constitutes a legal title. While botanists, of course, are called in to explain the differences, which can be found between two varieties, it is a legal task to define the minimal distances between varieties. Eventually, it is a political issue. The breeders united in **CIOPORA** are well advised to exert their influence when it comes to defining commercially reasonable distances, new varieties will have to keep from the existing ones. |||

1 I.e. the difference can be measured with a probability value of 1%.
2 COUNCIL REGULATION (EC) No 2100/94, of 27 July 1994 on Community plant variety rights.
3 Proposal for a Council Regulation (EEC) on Community plant variety rights, CO M(90) 347 final, Submitted by the Commission on 6 September 1990, 90/C 244/01.

About the author

Thomas Leidereiter is dealing with Intellectual Property in general and Plant Variety Right ("PVR") matters in particular at Luther Rechtsanwaltsgesellschaft mbH, Hamburg. With an IP background covering also trademark law and the law on unfair competition, he is advising clients on all aspects of protection of plant innovations. Thomas Leidereiter has been involved in some major court cases dealing with fundamental PVR issues in the ornamental sector as well as questions of PVR infringement. He is a member of the Expert Committee on the Protection of Plant Innovations at GRUR, a member of CIOPORA, its lawyer's panel and the Working Group on DUS

What is the secret of the success of the CPVO and what is its role in the horticultural business?

A CPVO success story

by Martin Ekvad

I felt honoured when CIOPORA asked me to provide an overview on the CPVO success story, as this indicates that CIOPORA believes in the EU plant variety system.

Steady growth

The number of applications has been growing steadily from 1996 until 2007. Since 2007, the number of applications has been stable at a little less than 3,000 per year. A total number of 45,500 applications were received from 1996 until 31 December 2012. 34,000 titles were granted and more than 20,300 titles are still in force. The number of protected titles increases each year. The majority of applications received come from the ornamental sector (in 2012; 49% ornamental, 27% agricultural, 16 % vegetable, 8 % fruit). These statistics are indicators that the system is a success.

One, affordable, application for a large marketplace

Although many factors have contributed to the success of the EU system, I think the main factor is simple. A multinational system for granting an EU wide intellectual property rights through one application is efficient for breeders. The EU plant variety protection system takes the idea of efficiency further in the sense that a single title is granted throughout the territory of the EU.

You have to be brave to proclaim in the CIOPORA Chronicle that the EU system is cheap. I nevertheless dare to declare that, all in all, the price for an EU title is generally reasonable and this has contributed to the success. The alternative of an EU system would be to protect and pay fees in a number of Member States which would certainly not be cheaper. The application fees were reduced from € 900 to € 650 as from January this year. In addition, the Administrative Council has decided to propose a decrease of the annual fees from € 300 to € 250 as from January 2014 to the Commission. In general, the fees for technical examinations are reasonable although in the fruit sector, a sector with many CIOPORA members, the fees tend to be high compared to other species. An R&D project, co-financed by the CPVO, is in place to review whether costs can be limited for fruit species. The CPVO is determined to keep costs affordable and I have no doubt that CIOPORA would remind us if this aim is not achieved.

A centre for harmonisation

Apart from the mere business of handling applications, the CPVO has become a centre for member states and breeders to exchange views and develop ideas and common procedures and practices. Examples are harmonising the technical work of examination offices and the joint work on new IT tools such as the Variety Finder data base and an electronic application system. In addition, the CPVO Quality Audit Service has been created in order to set a minimum quality for Examination Offices to comply with in order to be entrusted as competent authorities to carry out DUS tests on behalf of the CPVO.

A key element in a well-functioning system is input from the users and the breeders' organisations such as CIOPORA. CIOPORA, ESA and Plantum are observers in the meetings of the Administrative Council of the CPVO where they provide input on all matters of policy including technical, legal and financial matters. Breeders are involved in the CPVO's daily work by actively participating in meetings and providing comments on documents.

CPVO's role in the horticultural business

The role of plant variety rights is to ensure that companies investing in the creation of new plant varieties are rewarded. The rewards can be used for R&D, which will lead to new varieties being created.
In the horticultural sector, retailers are keen to provide new varieties for consumers and producers are keen to provide the retailers with new varieties. To be successful in this market it is important for breeders to provide new competitive varieties. I believe that a protected variety is also important in terms of quality. The variety is tested and described by an independent authority and it should be new. This ensures a certain quality, which unprotected varieties on the market do not need to comply with in the ornamental sector.

Enforcing PVRs: a real challenge

To convince the market to purchase a variety is one thing, to prevent competitors from selling a protected variety is another. Through protection, breeders aim to prevent competitors from selling the protected variety. Enforcing plant variety rights has proven to be a challenge for breeders for various reasons. The CPVO is playing a supporting role by providing policy guidance and assistance in the exercising of rights for the benefit of stakeholders. So far this support can be exemplified by the fact that the CPVO has organised enforcement seminars in various parts of the EU and is constantly providing information on request from stakeholders.

Minimum distances

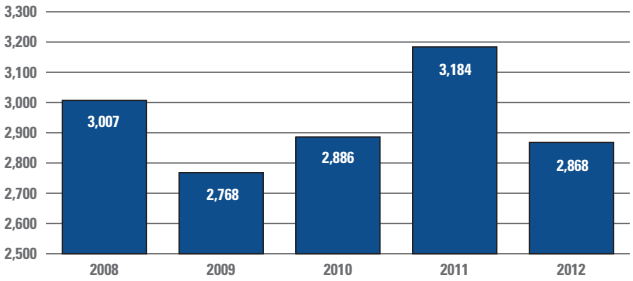
CIOPORA has not only highlighted that the legal tools for enforcement are sometimes hard to apply in practice, but also the fact that varieties are granted protection despite the fact that they are very similar to already protected varieties. It is argued that if larger distances from protected varieties were required for new varieties, this would lead to a stronger protection. It is harder to convince a producer to pay a royalty if the producer can get very similar varieties from other breeders at a lower price. Others argue that it is important for the breeding industry that many varieties can be protected. The more varieties are protected the more royalties can be collected.
Where does the CPVO come into this discussion? Distinctness is assessed by objective criteria laid down in protocols adopted by the CPVO Administrative Council and often based on a UPOV guideline. Indeed, the CPVO's role is to ensure that almost identical varieties are not protected. For this reason, draft protocols are discussed in technical working parties, often on UPOV as well as EU level, before a protocol is adopted. CIOPORA and other breeders' organisations are invited to these expert meetings. It is important that they contribute actively to make sure that the protocols, which might lead to registration of too similar varieties, are not adopted. I believe that the CPVO and the breeders' organisation should share this role.

Final remarks

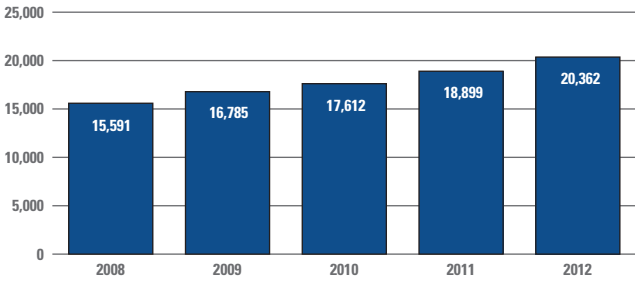
The EU system for protecting new plant varieties is only 20 years old but has already developed important competences in the management of plant variety rights. Worldwide it is the biggest system of its kind and it is aiming to offer high quality services to breeders at affordable costs. I believe that the CPVO and the breeders' organisations have a shared role in this respect. |||

The Headquarters of CPVO in Angers, France. Upon a kind invitation of the CPVO, CIOPORA members will visit the Community Office during the upcoming AGM of the association in Angers on Thursday, April 25, 2013.

Evolution of the number of applications received since 2008



Evolution of the number of rghts in force since 2008



About the author

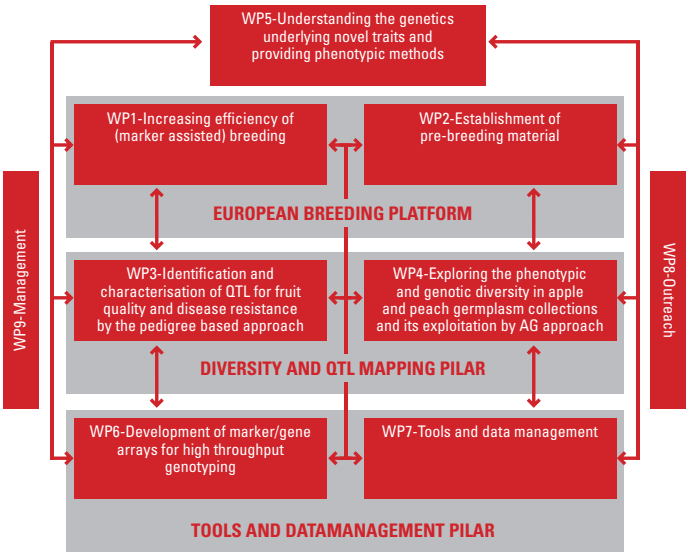
Martin Ekvad is President of the Community Plant Variety Office (CPVO) since 2011. Before taking up this post he was the Head of the Legal Service at the CPVO since 2003. Previously, Ekvad had been working as a lawyer in the law firm Linklaters in Brussels and the law firm Magnusson Wahlin Advokatbyrå in Stockholm. Ekvad was working at a civil court for two years before joining a law firm. Ekvad has a law degree from the University of Lund, Sweden and a LL.M from King's College in London.

FruitBreedomics improves efficiency of fruit breeding

The creation of a new fruit variety, either of pome fruits, or stone fruits is a long and elaborate process. The long juvenile period and life cycle of these species often hinders a fast development of new varieties. A new project FruitBreedomics under the funding of the EU FP7 program aims at building synergies in the EU fruit breeding sector and fostering an effective knowledge and technology transfer between the fruit sector stakeholders.

by Joan Bonany and François Laurens

Breeding programmes for major fruit species in Europe are numerous and distributed around the different growing areas with a total of 49 apple and 42 peach breeding programmes identified around Europe.
Pome fruit breeding programmes are widespread all over Europe but more predominantly in Central regions. There are also programmes located in other climatic environments with completely different set of requirements.
In case of stone fruit, breeding programmes are mostly located in the South. In general, as discovered by a recent survey by the FruitBreedomics project, apple breeding programmes focus on objectives such as disease resistance, fruit quality, productivity, storability, shelf life, fruit homogeneity and size. In the case of peach and nectarine, the aims of the breeding efforts are fruit flavor, firmness, sweetness and aroma, fruit characteristics, tree habit, harvest date and shelf life.
The breeding programmes are relying on both private and public funding, whereas the private funding often results in varieties with restricted schemes for development on the market ('club varieties').
Most of the fruit breeding programmes are based on the classic breeding schemes - phenotypical selection of best individuals in a specific election site is a common methodology. The Marker Assisted Selection is seldom used in commercial breeding programmes.



FruitBreedomics

In view of this situation the research project, FruitBreedomics, funded by the EU FP7 programe, was started to assist the fruit breeding programmes. FruitBreedomics aims at bridging the gap between the state-of-the-art genetic research and its application in fruit breeding. By using a multidisciplinary approach, including genetics, genomics, eco-physiology and bioinformatics, it is called upon to improve the efficiency of the apple and peach breeding programmes by:

1. developing new and adapted tools,
2. studying a wide range of traits to enlarge the coverage of selection criteria,
3. analysing and exploiting the wide genetic diversity available,
4. making the research outputs (valuable traits, genetic markers, new plant material) directly applicable for breeders,
5. establishing a stakeholder network

Although it focuses on apple and peach, many of its tools will also benefit other species.

Work packages

The project is structured in several work-packages (WPs). Two WPs are directly dedicated to breeding: WP1 develops a validated pipeline for Marker Assisted Breeding and implements it in the ongoing commercial breeding programs; WP2 makes available the selected pre-breeding material to the consortium of project partners and aims at reducing the introgression

time of new traits from wild species to pre-breeding material with advanced fruit quality by inducing early flowering thanks to the fast-breeding technology.
The research efforts are directed on improvement of our understanding of the genetics of some major horticultural traits and the development of innovative research tools to efficiently find marker trait associations in breeding populations and genebank germplasm.
To overcome the main issues of the past genetic studies on fruit trees (narrow genetic diversity, low mapping density), FruitBreedomics focuses on two innovative and complementary genetic mapping approaches based on a wider genetic diversity: i) pedigree-based analysis (PBA) (WP3) and ii) Genome-wide association (GWA) mapping (WP4). The WP5 – WP9 respectively include: analysis of the genetics, development of high throughput phenotyping tools on novel and important traits, marker and gene arrays for high throughput genotyping, elaboration of the software and data management tools for breeders, dissemination and communication and general management of the project.

Stakeholders

The network of stakeholders is a significant component of the project. Until now, the focus has been on breeders of apple and peach varieties. However, during the project lifetime, this network will be expanded. The Project Platform will optimise the knowledge transfer, technology and biological materials developed during and beyond the course of this project for its use at the scientific and industrial levels. The ultimate goal is the utilisation of the molecular tools by private and public breeders in the commercial breeding programmes.
The participation in this network is open to any European fruit breeding programme, fruit germplasm collection and relevant actors of the fruit value chain. The members of the network get access to the relevant information on the development of the project, are invited to the annual stakeholder congresses, the FruitBreedomics international conference and are eligible for training scholarships.
FruitBreedomics brings together 26 full partners and one invited party from ten EU countries plus South Africa, New Zealand, Israel, China and the USA. The partnership includes research institutes, universities and SMEs.

Project achievements

FruitBreedomics started on March 1, 2011, with a budget of €10 million co-financed by the FP7 of the European Commission and it will end by August 2015. Halfway through the project, significant progress has been made. Bases for the pilot studies which will apply genomic tools in commercial fruit breeding programs starting in 2013 have been built. These pilot studies will make use of some genotypic tools (low-density and cost-efficient SNP markers chip) made available within the framework of the project. Another tool that has been developed is a 20K SNP apple chip. This chip, together with the already available 9K SNP peach chip, will allow a better understanding of the genetic background of main agronomic traits. High throughput protocols for Monilinia resistance, fruit quality and abiotic stress are being developed by using non-destructive measurements, transcriptomic techniques, among others. The setting up of the FruitBreedomics database will allow easy access to project information for breeders.
The research projects like FruitBreedomics, serve the whole fruit value chain and the society in general. |||

About the authors

Joan Bonany is director of IRTA Fruit Research Subprogramme and outreach leader FruitBreedomics WP8 and Francois Laurens is senior scientist at the Institute of Research on Horticulture and Seeds at INRA Angers and coordinator of the FruitBreedomics project.

Tout arrive en France!

It comes as no surprise that this year's venue for CIOPORA's Annual General Meeting is Angers, which is the home town of the CPVO. In its long history dating back to 150 AD, Angers has been dubbed 'Ville des Fleurs' (City of Flowers) and 'Ville verte' (Green City). From April 22 to 25, Angers has the perfect chance to protect its green status with CIOPORA bringing the international community of ornamental and fruit breeders together within its fortified city walls.

by Anna Kaehne

CIOPORA's Annual General Meeting will include 32 hours of meetings, workshops and discussions, which all have the same common goal: to update CIOPORA's position on IP protection. CIOPORA will serve its guests brand new topics for the annual IP workshops, the IP-oriented agenda of the AGM and a little bit of fine French cuisine in between to help you digest all the IP-related information we have to offer.

April 22 – IP Workshops: 'Vive la connaissance!'
Long live the knowledge! The CIOPORA IP Workshops invite CIOPORA members and guests to three sessions of intensive learning experiences. This year's IP workshops will address a number of hands-on topics that every breeder should have on his or her radar. Dr. Katrin Ridinger from the consulting agency Henrik Schreiber Research & Consulting will share her expertise in the area of patent research in biotechnology with the CIOPORA members. Dr. Nicola Lanteri, international fiscal and economy consultant from the Studio Lanteri Associazione Professionale, will introduce the participants to the topic of international taxation of royalties. The third workshop will address the subject of licensing of IP Rights for breeders. The compact size of the groups will guarantee an effective learning experience.

April 23 – Working Group and Crop Section meetings: 'Une fleur ne fait pas une guirlande'
You cannot make a garland with one flower, nor can you achieve your goals without colleagues to share your working experiences with. That is why the networking and co-operation in the groups within the structure of CIOPORA is so important. This year CIOPORA provides its members with the opportunity to join the Working Group meetings during an open session. There has been also been a new development among the crop-oriented groups: the new Crop Section Gypsophila will hold its very first meeting during the CIOPORA AGM 2013 in Angers.

The magnificent setting of Brissac Castle will provide the spectacular backdrop for the CIOPORA's AGM dinner on April 23.

April 24 – Annual General Meeting: 'Tous pour un, un pour tous'
To find a mutual basis in order to update the position of CIOPORA on the central issues of the IP Protection is the focal point of the upcoming AGM of CIOPORA in Angers. The topics on the agenda will include discussions on:

- minimal distance between varieties;
- ground-breaking innovation;
- Essentially Derived Varieties (EDV);
- breeders' exemption;
- patents for plant-related inventions.

The Board of CIOPORA is looking forward to continuing the debates, for which the groundwork was successfully laid at the CIOPORA Conference on Patent and modern PBR for horticultural breeding in September 2012 in Venlo. President Andrea Mansuino emphasised that the AGM in Angers should become an important forum for surveying the opinions of the community in order to come up with the much needed solutions for the enhancement of IP rights protection for the horticultural breeders.

April 25 – Business excursions: 'Bon voyage...'
The revival of the business excursions in their original form of two separate tours - for ornamentals and fruits – is planned on the last day of the CIOPORA's AGM Week 2013. After a joint visit of the headquarters of the Community Plant Variety Office, the participants interested in visiting fruit production sites of the Anjou region will be taken on a tour by GEVES, and IFO, a company specialised in the research and development of apple and pear varieties.
For the participants involved in ornamental plants, CIOPORA will offer an excursion through several of the plant breeding companies located in the region.

France's accession to the 1991 Act of the UPOV convention

By passing the law n° 2011-1843, France has finally acceded to the 1991 Act of the UPOV Convention. Passed by the Parliament on November 28, 2011, this law was published on December 8, 2011. On April 27, 2012, France ratified the 1991 Act with the deposit of its instrument to UPOV Office. The Act came into force in France on May 27, 2012.

by Joël Guiard and Louise-Anne Petit

France has been a member of the UPOV since October 1971 and a part of the 1978 Act of the UPOV since February 1982. The accession to the 1991 Act has been discussed in depth, especially in regard to the farm-saved seeds issue.

INOV

The aim of the new law was to bring French legislation on Plant Breeders' Rights in compliance with the 1991 Act of UPOV and also with the EU regulation (CE) 2100/94, which is the legal base to get a Plant Breeder's Right (PBR) applicable on the territory of the European Community.

Article 1 of the law creates the new National Office for Plant Breeder's Rights, called the *Instance Nationale des Obtentions Végétales* (INOV). INOV has its headquarters within the GEVES premises. GEVES is France's official organisation overseeing the technical implementation of regulations on varieties and seeds.

This new office replaces the former entity, which was a committee of experts called National Committee for Protection of Varieties. In the former organisation, the titles were delivered collectively by several experts. To simplify the procedure and reduce the delays, the head of INOV is now in charge of granting Plant Breeder's Rights.

The main missions of INOV are:

- Granting Plant Breeders' Rights when varieties have fulfilled the legal requirements and delivering all official documents related to application and Plant Breeders' Rights.
- Cancelling Plant Breeders' Rights according to the conditions defined by law.

Besides these, INOV is also in charge of proposing any measure required to implement the law on Plant Breeders' Rights to the Ministry of Agriculture.

Major modification

Another major modification induced by the new law, is an evolution about the farm-saved seeds regulation (Article 16 of the law). The use of farm saved seeds was prohibited before the passing of the law. Now, the production of farm-saved seeds is authorised for the 21 species that are listed in the EU regulation (CE) 2100/94. The law stipulates that this list can be amended by decree of the Council of State (the highest administrative jurisdiction in France).

Farm-saved seeds of a protected variety can be used without the authorisation of the owner of the Plant Breeder's Right in two situations:

- Freely by small farmers according to the definition given in the regulation (CE) 2100/94
- By any other farmer subject to payment of a financial offset to the owner of the Plant Breeder's Right.

This system of levying financial offset aims to protect the interests of plant breeders and contributes to the financing of research for the creation of new varieties. For the purposes of the binding of the amount of this financial offset, either there is an interprofessional agreement or a contract between the owner of the right and the farmer. In the absence of such devices, the conditions for applying

this derogation and the basis to define the amount are decided by a decree of the Council of State.

Among the other modifications introduced by the new text, the following aspects can be highlighted: the introduction of the definition of the variety as written in the 1991 Act, the definition of the DUS system, the notion of the Essentially Derived Variety, the possibility to take into account technical examination results delivered by the applicant and the legal regime of Plant Breeders' Rights infringement. The legal texts for the implementation of this new law are still under preparation.

About the authors

Louise-Anne Petit is an intellectual property lawyer. She has been working as legal manager at GEVES, the French official organisation in charge of the technical implementation of regulations on varieties and seeds, since 2012. Joël Guiard is an agronomist specialised in plant breeding working for GEVES, the French examination office for testing new plant varieties. He has been involved in the implementation of regulation on varieties and seeds for more than 30 years. He has acquired a wealth of experience in the field of Plant Breeder's Rights, with active participation in the UPOV and the CPVO bodies.
For further information: www.geves.fr

For Meilland IP is The Next Big Thing for innovation

What's new? Wherever you go, whoever you meet, "What's new?" remains one of the first questions everyone asks. The novelty effect attracts people's attention, gives them an opportunity to identify with a new product. This obviously also applies to our sector and its pre-existing items, concepts, or products, and it is a part of the daily game in which breeders of new ornamental and fruit varieties are involved. But it is not enough to bring a new product to the market – to be innovative is really what customers and the market are looking for.

It is definitely a long-term process to get there. It is well known, when looking at a population of new seedlings, that it is hard to say on the spot which ones will be the commercial winners or the breakthrough innovations years later. At the same time, it is usually expected from a breeder and his team to come up with new and innovative shapes, features, plant profiles, etc. as quickly as possible.

Time is the main constraint

However, a plant remains a plant. Although we are living in the high-speed internet era, time still constitutes the main constraint in the innovation process. There is no way to bypass the phases of observation and evaluation in order to identify and select the most promising new cultivars. Observing them most generally under different agronomic and climatic conditions with the view to assess their performance to the benefit of those exploiting them thereafter.

Three pillars

At Meilland, the innovation process has been built up over the years by relying on three fundamental pillars: a genetic pool of carefully selected cultivars, the expertise of the team involved and the imagination of the breeding team. One can try to rank the most important factor among these, but all of them count for sure! The combination of these ingredients has led to the selection of various varieties: mono-use varieties, like the majority of the cut rose flowers, problem solvers like the MEIDILAND® series, but also multi-functional varieties, geared either to be used in landscape, garden or even patio pots.

Breakthroughs

From the past, Meivildo YVES PIAGET® remains a breakthrough innovation, being shaped like a peony and highly scented at the same time. Besides Meiviolin, PIERRE DE RONSARD®/EDEN ROSE® has been recognised for its incredible abundance of repeat blooms combined with an attractive contrast between the soft colour and the deep dark green glossy foliage. More recently, Meistiley Red ELEGANCE® has been featuring a new trend, mixing the" Elegance of a garden rose with the performance of a cut flower", while the compact roses from the DRIFT® series present the "Next big thing for small gardens".

IP

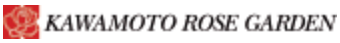
It is needless to say that all the innovation and, more generally, research and development activities would not be worth the investment without a relevant Intellectual Property protection. Among others, effective IP protection of plant innovation certainly requires a well-defined minimum distance approach so that a new cultivar is clearly distinguishable from the other pre-existing ones, allowing a concerned breeder to bring such innovations to the market to achieve return on investment and to prevent confusion in the trade and among the consumers.

Finally, isn't it true to say that one gets satisfied when ones innovative variety can be exploited on a long term basis, not only thanks to proper marketing inputs, but above all thanks to a strong and reliable IP strategy and system? |||

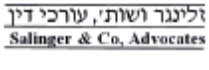
Rosa MIMI EDEN® Var. Meiptipier (Credits: ®Meilland International/ Double M Production).

DRIFT® Roses, The Next Big Thing for small gardens (Credits: ® Meilland International/Double M Production).

CIOPORA Members

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How to become a supporter? You are a natural person or company prepared to support and foster the objectives, purposes and policy of the association, but do not fulfil the requirements for membership in CIOPORA? Please contact CIOPORA at the address as featured on this page. CIOPORA's current Supporters are: Agri Information Partners, Distel Software, Hawita Gruppe, FloraCulture International, André Briant and Nevado Roses.

For further information about CIOPORA please contact the administrative office in Hamburg.

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