

【報告】

Intellectual Property and Commercializing Red-Fleshed Apples

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Abstract

Many of the new apple varieties that are appearing on supermarket shelves today are not only patented or registered for plant breeder's rights, but also trademarked and managed as propriety brands. This paper explores, through an examination of four of the red-fleshed apple brands that have recently appeared in global markets, the emergence of organizations that specialize in the commercialization, management, marketing, and intellectual property protection of these proprietary varieties.

1 Intellectual Property and the Commercialization of New Apple Varieties

The appearance of organizations that handle the commercialization of many of the new proprietary apple varieties that are appearing in global markets today has impacted the apple industry from the breeder to the grower, the nursery, the packer/shipper, the marketer, all the way down to the retailer and finally to the consumer. Although it is estimated that proprietary varieties presently occupy only around four percent of the fresh apple markets in western Europe and North America, with roughly half of this four percent held by Pink Lady, the first and most successful of the managed varieties¹, this percentage is expected to grow, with some

¹ Pink Lady is the trademarked name of the Cripps Pink variety, a cross made in 1973 (patented in the U.S. in 1992) by John E. Cripps, Senior Research Officer, at the Western Australia Department of Agriculture at the Manjium Horticultural Research Centre, which held the patent during its lifetime. Apple and Pear Australia (APAL) owns the trademark and is managed globally by the International Pink Lady Alliance (IPLA). / See Huang xiao chun, Yamano Yutaka, Wang Jian Jun (2012). "Restructuring of Apple Industry based on Intellectual Property," *Studies in the Humanities and Social Sciences* (Number 27) pp.6-9 (in Japanese)

expecting it to exceed 10 percent in the not-so-distant future².

Before the emergence of these new “club” or “managed” or “proprietary” varieties³, value accrued with the sale of the tree (the nursery) or the fruit (the grower, the wholesaler, the packer/shipper, the processor, the retailer). New varieties, once released, took many years to gain widespread consumer acceptance and to achieve market share. Many never did.

However, changes in global intellectual property (IP) protocols and how they are applied to plant material have made it possible for plant breeders to earn income from their plant patents. When the World Intellectual Property Organization (WIPO) was established in 1967, plant varieties were included for IP protection. Subsequent to this, the Plant Rights Act of 1987, the 1991 International Convention for the Protection of New Varieties of Plants (UPOV) and the Plant Breeders’ Rights (PBR) Act of 1994 refined these rights within the WIPO framework. Under the provisions of UPOV, PBR was set at 25 years for trees and vines and 20 years for all other plants⁴.

This new intellectual property framework provided incentives for private growers and nurseries to begin their own breeding programs. It also offered new opportunities for public apple breeding programs, particularly those in New Zealand and the United States. These, and similar plant breeding programs elsewhere, traditionally played prominent roles in the development and introduction of new varieties. However, in the 1980s and 1990s, many were faced with severe cuts in public funding and needed to develop independent revenue streams to continue operating⁵.

One issue of concern was how to best exploit the earning potential of new varieties. In the 1980s and 1990s, the arrival of three open-release varieties, Fuji, Gala and Braeburn, had a large impact on apple markets throughout the world. These three varieties proved popular with consumers, who found them far superior in taste and texture to the Red and Golden Delicious varieties that had come to dominate global apple markets after World War II. Not only did demand rise for these varieties, consumers appeared to be willing to

² For example, proprietary apples occupied around 15% of the retail apple market in Switzerland in 2019, with Jazz and Pink Lady controlling over 50% (*Fresh Plaza* “Club apples - a successful marketing concept? Today, every seventh apple in Switzerland is a club apple” (December 24, 2019; Source: Marktanalysen BLW)

³ We will henceforth use “club” to describe the organizational framework by which trademarked apples are commercialized and managed. Many groups that manage these new proprietary varieties prefer to say that theirs are “managed” or “proprietary” instead of a “club,” a term which they feel implies a more exclusive and closed system.

⁴ Michael Blakeney. *Intellectual Property Rights and Food Security* (CABI, 2009) pp.25–27, 79–92

⁵ In the United States, state universities, such as Cornell University, the University of Minnesota and Washington State University dominated apple breeding and the introduction of new apple varieties. As state and university funding for these programs were reduced, they had to develop independent income streams. In New Zealand, HortResearch (now Plant & Food Research) was the government-funded plant breeding program. When government funding was cut back for HortResearch and other national research institutes in New Zealand, they had to become self-sustaining. Exploiting the intellectual property of their products became their major source of income.

pay more for them. As a result, significant price differentials began to emerge between these and older varieties. Enticed by the prospects of increased demand and profits in both domestic and export markets, nurseries rushed to propagate and growers to plant them. However, although these varieties initially commanded premium prices, over-production led to over-supply and uneven quality and when the growing Asian export market for apples contracted with the 1997–98 Asian financial crisis, the original price premiums disappeared and growers and marketers who had invested in them often suffered significant losses⁶.

The club concept emerged as a means by which a new variety could be introduced quickly into markets to realize patent/PBR royalty income for the breeder while the patent/PBR was still active, but also to sustain stable premium prices by managing supply and quality. This was done by adding a trademark to the patent/PBR and creating an organizational structure, the club, to assume proprietary control over the trademark and to raise the capital necessary to commercialize and manage the new variety under that trademark. In a club system, the value has thus moved beyond just the tree and the fruit to the variety's intellectual property, which begins with the patent/PBR but is sustained by the trademark, the brand. Unlike the patent/PBR, the trademark does not expire.

However, it must be said that these clubs are organized and managed in many ways. Most, but not all, require buy-ins or upfront membership fees to help finance the initial market rollout and take royalties on the nursery tree, the packout, as well as an extra assessment for marketing and promotions. The clubs, to varying degrees, also set brix, color and other quality standards that must be maintained if the apple is to be sold under the trademarked name. Many of the clubs also control, some more strictly than others, who can join the club, the number of trees that will be planted and where they will be planted. This is done to maintain the quality and the relative scarcity necessary to attain the premium prices that can provide revenue to the breeder, as well as to cover the administrative costs of the club itself (personnel, travel, legal counsel to litigate trademark infringements, etc.) and the marketing expenses, advertising and other promotions that are rarely found with open-release varieties, and to reward growers and other stakeholders who have assumed the risk of investing in the variety.

These efforts to develop and exploit the trademark, or the brand, have in turn led to new approaches to and new configurations of investment, management, and marketing. The rollouts of many of these new club varieties are now being handled by marketing bodies, many of which have grown out of tree nursery operations, that specialize in the commercialization and management of new varieties and their intellectual property.

⁶ Belrose, Inc. *2013 World Apple Review*, pp. 50–51 / Ross Courtney, "International nursery groups revamp to keep up with and drive the world of managed varieties" *Good Fruit Grower* August 2019 (Volume 70, Number 13)

2 Commercializing Red-Fleshed Apples

In recent years, a new type of apple has been introduced in apple markets throughout the world. These “red-flesh” apples, bred largely for the fresh market, are being commercialized much as clubbed white-fleshed apples are. Although consumers are used to apples with skins of different colors, inside these red, green, yellow, or otherwise hued apples, the flesh is almost always white. However, over the past twenty or so years, several private breeders and breeding programs have been crossing traditional white-fleshed apples with crabs and other red-fleshed apples to develop apples with red flesh that can be sold in the fresh market as well as for processing.

The breeding of red-fleshed apples for commercial release, like that of white-fleshed apples, is a long and painstaking process. Although there are many examples of a serendipitous birth from a seed or mutation, like the green apple that grew as a seedling in 1868 in Australia in the garden of “Granny” Smith⁷, most apples that appear on the market have involved many years, more than twenty years in most cases, of numerous crosses before a single cultivar amongst thousands is deemed suitable for commercial release.

This problem is compounded for those working to develop a red-fleshed apple that can be released and marketed for fresh consumption. Crabs and other red-fleshed apples are as a rule highly acidic, tart, bitter, astringent or otherwise not suited for raw consumption. The challenge for the breeder is to breed out these problematic traits, while retaining the flesh color and the disease resistance and other functional qualities they contain.

However, efforts on the part of private breeders and breeding programs in different parts of the world have yielded results, and over the past decade the apples they have bred, patented, and had trademarked have begun to appear in limited quantities in fresh markets and as processed products (jams, juice, etc.) throughout the world. For the most part, they are organized and managed as clubs and tend to be extensions or reconfigurations of existing clubs or marketing organizations.

In general, the organizations that are commercializing these new red-fleshed varieties have taken pains to distinguish and separate red-fleshed from conventional white-fleshed apples, often marketing them almost as a different fruit. Another characteristic is that of the many patent/PBR applications have been approved for red-fleshed cultivars, most commercializing organizations are trademarking and marketing their varieties under a single umbrella brand instead of assigning a single trademark or brand name to a single registered variety.

In this paper we examine four of the major red-flesh apple clubs, how they have been organized and their early moves toward commercialization. Four brands that have stood out in the developing red-flesh market are Kissabel, Red Moon, Lucy and Redlove⁸. The organizations that are managing the

⁷ Geraldine Warner. “Granny’s Legacy” *Good Fruit Grower* December 2011 (Volume 62, Number 17)

⁸ Another red-fleshed apple on the market is Baya®/Marisa, developed by the Bayerisches Obstzentrum (Bavarian Fruit Centre) in Germany and marketed in the U.K. as “Tickled Pink.”

commercialization of these four brands, International Fruit Obtention (Kissabel), Kiku Variety Management (Red Moon), Proprietary Variety Management (Lucy) and Lubera (Redlove) all grew out of nursery operations. How these marketing organizations evolved from their nursery roots and the central role they play in the world of the apple clubs provides insights into how the clubs and management of proprietary varieties are transforming the apple industry.

International Fruit Obtention (IFO) and Kissabel®

IFO (Angers, France) is a private company that was founded in 2004 when three large French nursery companies, DL Davodeau Ligonnière, Mondial Fruit Selection, and Valois, came together to form a breeding program that was specifically dedicated to the development of distinctive rootstocks and proprietary apple varieties, including those with red flesh, with an emphasis on disease resistance⁹. DL Davodeau Ligonnière and Valois subsequently merged, in 2015, to form Dalival, which is now one of France's largest nurseries as well as a major grower of apples and pears. IFO continues to be affiliated with Dalival¹⁰.

The red-fleshed apples that are marketed under the Kissabel brand were bred at the IFO experimental station located outside Angers, France. Valerie Fouillet is the IFO Breeding and Selection Manager and is listed as the "inventor" of the cultivars whose patents have been approved by the United States Patent and Trademark Office (USPTO). IFO is listed as the "assignee" and is therefore the owner of the patent¹¹. After repeated crosses, three candidates were judged ready for commercialization. These were then trademarked under the umbrella trademark "Kissabel" and given individual skin and flesh color-designations to distinguish one from the other. IFO owns the trademark and continues to work on new red- and other colored flesh apples for future IFORED release and commercialization.

As these red-fleshed crosses approached marketability, IFO began to assemble a team that would commercialize and manage the production of Kissabel apples in different regional markets. On November 6, 2012, IFO announced the formation of an international consortium, IFORED, that would manage the roll out of Kissabel apples in regions throughout the world. The original eleven members has grown to fourteen, located in thirteen countries. These partners have managed and overseen test plantings and have begun initial production of the three released Kissabel varieties as well as the testing of yet-to-be released Kissabel varieties¹².

⁹ Dalival official site <https://www.dalival.com/research-ifo/> & Richard Lehnert. "Red-fleshed apples: These apples are poised to become Next Big Thing's next big thing" *Good Fruit Grower* January 15, 2013 (Volume 64, Number 2)

¹⁰ "Dalival est né," *Revue de Presse Dalival*, February 2015. <https://www.dalival.com/wp-content/uploads/2015/11/REVUE-DE-PRESSE-DALIVAL-Article-Dalival-reusir-02-15.pdf>

¹¹ U.S. Patent and Trademark Office <https://www.uspto.gov>

¹² IFORED Press Release. "Global Partnership Forms to Develop and Market Red-Flesh Apple Varieties" <https://docplayer.net/14326150-Global-partnership-forms-to-develop-and-market-red-flesh-apple-varieties.html> November 6, 2012 & "IFOREED expands" *Good Fruit Grower* July 8, 2014 (Volume 65, Number 12)

Like other organizations or consortiums that commercialize and market proprietary varieties, IFORED partners pay an upfront membership fee to IFO to join IFORED. There are also tree royalties that go to IFO and packout and other royalties that go to IFORED to cover administrative, marketing, and other expenses. Like other club programs, this information is privileged and not available to the public.

Figure 1: Kissable® (IFORED)

Trademarks	Kissabel® Jaune Kissabel® Orange Kissabel® Rouge
Breeder	Valerie Fouillet
Variety Owner	IFO
Trademark Owner	IFO
Commercialization: Consortium members	<p>EUROPE</p> <ul style="list-style-type: none"> ▪ IFO, France ▪ AMG (Gerfruitst and Mesfruits), France ▪ Blue Whale, France <growers' group, exporter> ▪ Fenaco, Switzerland <production and supply cooperative> ▪ NovaMela (VOG, VI.P, Melinda, La Trentina, Rivoira), Italy <evaluation, acquisition & marketing of new apple varieties on behalf the four members> ▪ Nufri, Spain <producer, importer, marketer of fresh & processed produce> ▪ Empire World Trade Worldwide Fruit, United Kingdom <international fruit marketer & distributor> ▪ Red Apple Germany, Germany <subsidiary of DOSK, R&D consortium of 9 German cooperatives> <p>SOUTHERN HEMISPHERE</p> <ul style="list-style-type: none"> ▪ Mono Azul, Argentina <producer, packer, sales> ▪ Unifrutti, Chili <producer, exporter> ▪ Dutoit, South Africa <producer, distributor, marketer> ▪ Montague Fresh, Australia <production, logistics> ▪ Yummy Fruit, New Zealand <producer, packer, marketer> <p>NORTH AMERICA</p> <ul style="list-style-type: none"> ▪ Next Big Thing, USA and Canada: <growers cooperative that manages the SweeTango® variety>

Source: IFO website <https://www.ifo-fruit.com/en/our-projects/ifored-sas-2/>

KIKU Variety Management (KVM) and Red Moon®

KVM (Girland, South Tyrol, Italy) is the varietal management enterprise that has grown out of the nursery and varietal development operations owned by the Braun family. The Brauns moved into variety development and commercialization in the early 1990s, when the father of the present KVM CEO brought a branch mutation of a Fuji tree from Japan to Italy, and after testing and making improvements registered the apple as “Fubrax” (U.S. patent filed in 2006) and trademarked it as “Fuji KIKU”¹³. The nursery business

¹³ Kiku official website <https://www.sweetkiku.com/about>

(Nurseries Braun) was subsequently separated from the variety development, commercialization, and management operation. KVM manages or owns the trademarks of several other varieties besides KIKU, including ISAAQ®/CIV323, Crimson Snow®/MC38 and Swing®/Xeleven.

KVM has also moved into the red-flesh market with the Red Moon brand. Unlike the apples bred by IFO, the Red Moon apple has come from a collaboration between a private breeder, Jean-Luc Carrieres (Montcuq, France), the French nursery Escande (Saint-Georges, France) and KVM. Carrieres has traveled often to Kazakhstan and elsewhere in the Caucasus Mountain region to collect seeds and bring them back to France to cross with domestic and other varieties. KVM entered into an agreement with Escande and Carrieres to form the Red Moon Company which owns and promotes the Red Moon brand and other varieties that will emerge from the breeding efforts of Carriere and Escande. KVM handles the commercialization and marketing¹⁴.

The Dutch consultant Hans Scholten and the Italian packer/shipper and marketer Fratelli Clementi are also partners in the Red Moon Company and are co-owners of the trademark. Clementi was initially the only licensee that handled the cultivation and marketing of Red Moon. Meanwhile Bio Meran (South Tyrol, Italy) has joined for organic and biodynamic production¹⁵.

The Red Moon Company has since begun expand beyond Western Europe. In 2019, Barolli Orchards in Australia's Goulburn Valley joined the Red Moon apple team to grow and market for the Australian market¹⁶.

Figure 2: Red Moon® (KVM)

Trademarks	Red Moon® Surprise Inside!®
Breeder	Jean-Luc Carrieres (Montcuq, France)
Variety Owner	Red Moon Company
Trademark Owners / Partners	Red Moon Company <ul style="list-style-type: none"> ▪ KVM <commercialization> ▪ Jean-Luc Carrieres (Montcuq, France) ▪ Escande Nursery (Saint-Georges, France) ▪ Hans Scholten, consultant (Netherlands) ▪ Gebr. Clementi, cultivation and marketing (Italy) ▪ Bio Meran, organic and biodynamic production (Italy)
Global Partners	<ul style="list-style-type: none"> ▪ Barolli Orchards (Australia) <grower>

Source: "Harvesting started for Red Moon, while tests for international expansion continue" *FreshPlaza* September 23, 2021. <https://www.freshplaza.com/article/9358077/harvesting-started-for-red-moon-while-tests-for-international-expansion-continue/>
 Red Moon website <https://www.redmoon-apple.com/en/>

¹⁴ Red Moon official website <http://braun-apple.com/wp-content/uploads/2017/08/Flyer-RedMoon.pdf>

¹⁵ "Harvesting started for Red Moon, while tests for international expansion continue" *FreshPlaza* September 23, 2021 <https://www.freshplaza.com/article/9358077/harvesting-started-for-red-moon-while-tests-for-international-expansion-continue/>

¹⁶ "Australian grower gets on board with RedMoon®" *Fresh Plaza* (December 18, 2018)

Test plantings are also taking place in Serbia, with an eye on European markets east of the EU, including Russia¹⁷.

Proprietary Variety Management (PVM) and Lucy™

PVM (Yakima, Washington, USA) was formed in 2012 as a global intellectual property and commercialization company. It grew out of and is closely associated with Brandt's Fruit Trees. Brandt's Fruit Trees and its president, Lynnell Brandt, have been major forces in the club apple movement from its earliest days in the 1990s. Lynnell Brandt is president/CEO of both Brandt's Fruit Trees and PVM. Brandt formed "Pink Lady® America" in 2000 and holds the license to manage the propagation and marketing of Pink Lady apples in North America¹⁸.

Brandt is also a founding member of the Associated International Group of Nurseries (AIGN) and serves as its president. AIGN was founded in 1988 as an association of nurseries in growing areas throughout the world, organized to share information on new varieties and rootstocks. Its members soon realized the potential of harnessing the intellectual property of new varieties and began to coordinate the global development of the intellectual property and commercialization of new fruit varieties. In 1996, another global network, the International New Varieties Network (INN) was formed. IFO and Dalival are both INN members. Both networks facilitate the quarantining, the initial propagation and evaluation, the protection of intellectual property, the commercialization, and propagation of nursery trees and are an indication of the central role played by nurseries and nursery associations in the development and commercialization of proprietary apples¹⁹.

PVM holds the rights to commercialize Cosmic Crisp®/WA38 and Sunrise Magic®/WA2, varieties out of the Washington State University breeding program. It also handles the commercialization outside of North America of the Cornell University varieties SnapDragon®/NY1 and RubyFrost®/NY2²⁰.

PVM has taken over the commercialization of the Lucy red-flesh brand. Like Red Moon, the apples in the red-flesh Lucy series have come from a private breeder, Bill Howell. In 2001, Howell crossed a red-fleshed variety, Arlie Red, with the University of Minnesota variety Honeycrisp and in 2014 applied for U.S. patents on two of the red-fleshed apples that had resulted, Howell TC2 and Howell TC3. Subsequently, in 2017, he applied for a U.S. patent for Howell TC7. He made these applications as the inventor and retained

¹⁷ "2021.9.23 Carl Collin *Eurofruit* "Red Moon volumes to increase Italian harvesting began in mid-September while international production is ramping up" September 23, 2021 <http://www.fruitnet.com/eurofruit/article/186356/red-moon-volumes-to-increase>

¹⁸ Geraldine Warner "Pink Lady, the brand pioneer: New sports of Cripps Pink will be sold under the Pink Lady brand." *Good Fruit Growers* March 15, 2008 (Volume 59, Number 6)

¹⁹ Lists of member nurseries are available on the official websites of AIGN <https://aign.org/members/> and INN <https://inn-varietiesnetwork.com/our-members/>

²⁰ PVM website <https://provarmanagement.com/snapdragon/> & <https://provarmanagement.com/rubyfrost/>

the rights (assignee) for his company, Howell Fruit Advantage²¹.

Howell subsequently granted ownership of the trademark for the three Howell varieties to Brandt’s Fruit Trees. Brandt’s Fruit Trees, in turn, conferred the right to be the exclusive U.S. master licensee to PVM. PVM then awarded Brandt’s Fruit Trees U.S. propagation rights. PVM also grants non-exclusive licenses to growers to produce the Howell apples to sell in direct sales venues under the Lucy brand under the condition that they meet minimum U.S. fancy quality standards. Growers must pay a tree royalty to the nursery as well as a production royalty of US\$1.00 per tree beginning in the third year after the purchase of the tree²².

PVM has licensed Stemilt Growers, Inc.²³ and Chelan Fresh Marketing, two large vertically-integrated grower/shipper/packers/marketers in central Washington, to grow, pack and sell the Lucy varieties to commercial growers. As mentioned above, Lucy apples are available to farmers markets and farmgate growers, although a farmgate grower agreement must be concluded²⁴. PVM also handles, through AIGN, the global distribution of Lucy brand apples.

Figure 3: Lucy™ (PVM)

Trademarks	Lucy™ Lucy™ Rose Lucy™ Glo
Breeder	William Edward Howell
Variety Owner	Howell Fruit Advantage, LL
Trademark Owner	Brandt’s Fruit Trees
Commercialization	PVM

Source: PVM website <https://provarmanagement.com/wp-content/uploads/2019/02/Lucy-contract.pdf>

Lubera and Redlove®

Like Red Moon and Lucy, Redlove apples were bred by a private breeder, Markus Kobelt who, with his wife, are founders and owners of Lubera Nursery, located in Buchs, Switzerland. To date, Lubera has released five trademarked red-fleshed varieties: Redlove®Calypso®, Redlove®Circe®, Redlove®Era®, Redlove®Odysso®, Redlove® Lollypop®. In the three U.S patent applications that have been approved, Markus Kobelt was listed as inventor while the patent was assigned to Lubera. Redlove apples are protected

²¹ U.S. Patent and Trademark Office <https://www.uspto.gov> Note: Bill Powell served as a plant virology research technologist at the Washington State University Irrigated Agriculture Research and Extension Center (Prosser, Washington, USA) from 1973 to 2012. (Geraldine Warner, “Breeder hits the jackpot” *Good Fruit Grower* August 2013). Howell passed away in 2020.

²² PVM “Farmgate Agreement” <https://provarmanagement.com/wp-content/uploads/2019/02/Lucy-contract.pdf>

²³ Stemilt is also testing the Redlove red varieties developed by Markus Kobelt (Lubera Nursery). Stemilt is also a member of Next Big Thing, which an IFORED partner.

²⁴ Dan Wheat. “New apple varieties red inside and out” *Capital Press* December 31, 2019

and licensed exclusively through Lubera.

Redlove trees for small-scale or hobby growers can only be ordered from licensed nurseries. To supply Redlove trees to commercial growers, Kobelt partnered with the Swiss nursery Beat Lehner and the Swiss apple grower, Thomas Hungerbühler, to form a new company that they named Fruture. Fruture then entered into a joint venture with a company in the Netherlands, Next Fruit Generation (NFG) Group, which in turn is associated with Belgium’s largest fruit growers organization, Belgische Fruitveiling (BFV), to market the red varieties globally²⁵.

NFG has begun to offer exclusive licensing to companies in different territories. Lenswood Apples is a cooperative of thirty growers in South Australia and Next Fruit Generation (NFGA), its trademark variety fruit development subsidiary, is the exclusive licensee in Australia²⁶. In 2010, it was reported that the license in China to propagate and develop production was awarded to the Goldland Fruit Group (Hebei Province)²⁷.

Figure 4: Redlove® (Fruture)

Trademarked Varieties	Redlove® Calypso® Redlove® Circe® Redlove® Era® Redlove® Odyssso® Redlove® Lollypop®
Breeder	Markus Kobelt
Variety Owner	Lubera
Trademark Owner	Lubera
Commercialization	Fruture (Lubera + Beat Lehner + Thomas Hungerbühler)
Global Partners	<ul style="list-style-type: none"> ▪ Lenswood Apples / Next Fruit Generation, Australia <growers cooperative, marketer> ▪ Goldland Fruit Group, China <propagation, sales>

Source: Geraldine Warner. “Breeder Hits the Jackpot” *Good Fruit Grower* August 2013 (Volume 16, Number 13)

3 Discussion

These red-fleshed apples are joining many other clubbed apples in an increasingly crowded and competitive market. They must compete for limited supermarket shelf space and name recognition with older well-known white-fleshed apples that include commodity apples like Fuji, Gala, Red and Golden Delicious, Granny Smith and Honeycrisp, established club varieties such as Pink Lady, Jazz, Envy and Kanzi, but also

²⁵ Geraldine Warner. “Totally Red: New apple varieties developed by Swiss breeder Markus Kobelt are red from the skin to the core.” *Good Fruit Grower* October 1, 2010 (Volume 61, Number 15). “Belgian Fruit Cooperative sells first Redlove apples” *Fresh Plaza* September 24, 2020

²⁶ Lenswood official website <http://lenswoodcoop.com.au/nfga/redlove/>

²⁷ Geraldine Warner. “Totally Red: New apple varieties developed by Swiss breeder Markus Kobelt are red from the skin to the core.” *Good Fruit Grower* October 1, 2010 (Volume 61, Number 15)

with the many other newly-released proprietary white-fleshed club apples.

Persons in the industry say that many new clubs will fail, others will settle into regional or other niches, and only a few will emerge as established, global brands²⁸. One marketer told us that of the seventy or so club varieties that were in existence ten years ago, only thirty-five survive as clubs today. Thus, one anticipates that of the 100 or more club varieties that exist today, few will emerge as true global players.

Club managers across the board agree that three things are necessary to succeed in this increasingly competitive market: a good apple, a sound management organization or team and a good marketing strategy. The first is a given. With the many choices now available to consumers, a variety that is lacking in taste or even appearance will have difficulty gaining market traction. As a result, these days, few “bad” or mediocre apples become club apples. The vetting process, carried out by the breeders themselves and the bodies that have emerged to organize the clubs and commercialize new varieties, has become more and more exacting. The key to creating a successful brand in the minds of most in the industry is how the club is organized and run and how the new variety is marketed and promoted.

It is the marketing organizations or marketing structures that have been formed specifically to commercialize and manage the club varieties that most clearly characterize the club system and distinguish the way trademarked apples are marketed from open-release commodity apples. Many, if not most, of these organizations emerged from the tree nursery industry, although integrated grower-packer-shipping enterprises have also developed specialized marketing departments that manage, promote, and protect the brands they may own or those of the consortiums to which they belong. Moreover, most of these marketing organizations have created or merged into larger marketing consortiums in order to better handle the global nature of and increasingly crowded and competitive apple market.

The organizations that are managing the commercialization of the red-fleshed apple brands are emphasizing the uniqueness of these apples to distinguish them from the new white-fleshed proprietary apples appearing on global markets. Although IFO and KVM develop other varieties, they have been instrumental in creating consortiums or partnerships, IFORED and Red Moon, that focus exclusively on their red-fleshed varieties, whereas PVM handles other brands besides Lucy. The focus of Fruture and Lubera is on Redlove.

Red-Fleshed Apples and Asia

As these marketing consortiums organize their global alliances, they look for partners in different apple growing regions: Europe, North and South America, South Africa, New Zealand, and Australia. Although these partners, or sub-licensees, exercise considerable discretion when selecting which varieties to test and

²⁸ Melissa Hansen. “Europe has 30 club varieties: With more variety releases and fewer retail chains, securing shelf space is more difficult” *Good Fruit Grower* November 1, 2008 (Volume 59, Number 16)

plant, where and how to plant, marketing strategies, etc., the master license holder, or owner of the trademark, usually retains overall control, which can include choosing which nurseries in each region will be allowed to propagate the trees.

Notable by their absence in these consortiums are companies in Asia. Establishing partnerships in Asia has proved to be a challenge for many of the global alliances. Even though China is by far the world's greatest producer of apples and is itself a huge market, concerns over the protection of intellectual property have made the managers of many proprietary varieties leery of licensing Chinese companies. On the other hand, in South Korea and Japan, the large agricultural cooperatives have thus far been hesitant about becoming involved in proprietary varieties and global networks and consortiums, whereas other apple industry players, particularly the nurseries, are small in scale and generally lack the capital or marketing resources to become active participants or partners in a global club system. In Japan, the idea of trademarking and branding varieties for domestic and overseas production is still underdeveloped.

In Japan, several red-fleshed apples have been bred and released by public and private breeders. For example, of the public breeding programs, the Nagano Fruit Tree Experiment Station has released several red-fleshed varieties, including Moon Rouge and Naka no Kirameki. The Hirosaki University breeding program has released Kurenai no Yume and the National Agriculture and the Institute of Fruit Tree and Tea Science of the Food Research Organization (NARTO) has released Ruby Sweet and Rose Pearl. However, although these have been registered in Japan, there has been little sign that they are being promoted globally.

Sources

We have conducted interviews with several persons who play prominent roles in the organizations that are mentioned in this paper. However, these organizations that own and/or manage the trademarks of the clubs are, to varying degrees, very protective of information regarding how their organizations are run as well as details about their royalty structures and production and marketing strategies. Much of the information we have received in these interviews is confidential, so in this paper we have accessed information that is openly available, either in industry publications or on the websites of the organizations themselves.

Industry Publications

- *Good Fruit Grower* (Yakima, Washington, USA)
- *Fruit Growers News* (Sparta, Michigan, USA)

Online Industry Sources

- FreshPlaza

Kissabel

- International Fruit Obtention (IFO): <https://www.ifo-fruit.com/en/>
- Dalival: <https://www.dalival.com/dalival-2/>
- International New Varieties Network (INN): <https://inn-varietiesnetwork.com>

Red Moon

- Kiku Variety Manager (KVM): <https://www.kiku-partner.com/en/> · <https://www.kiku-partner.com/en/>
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