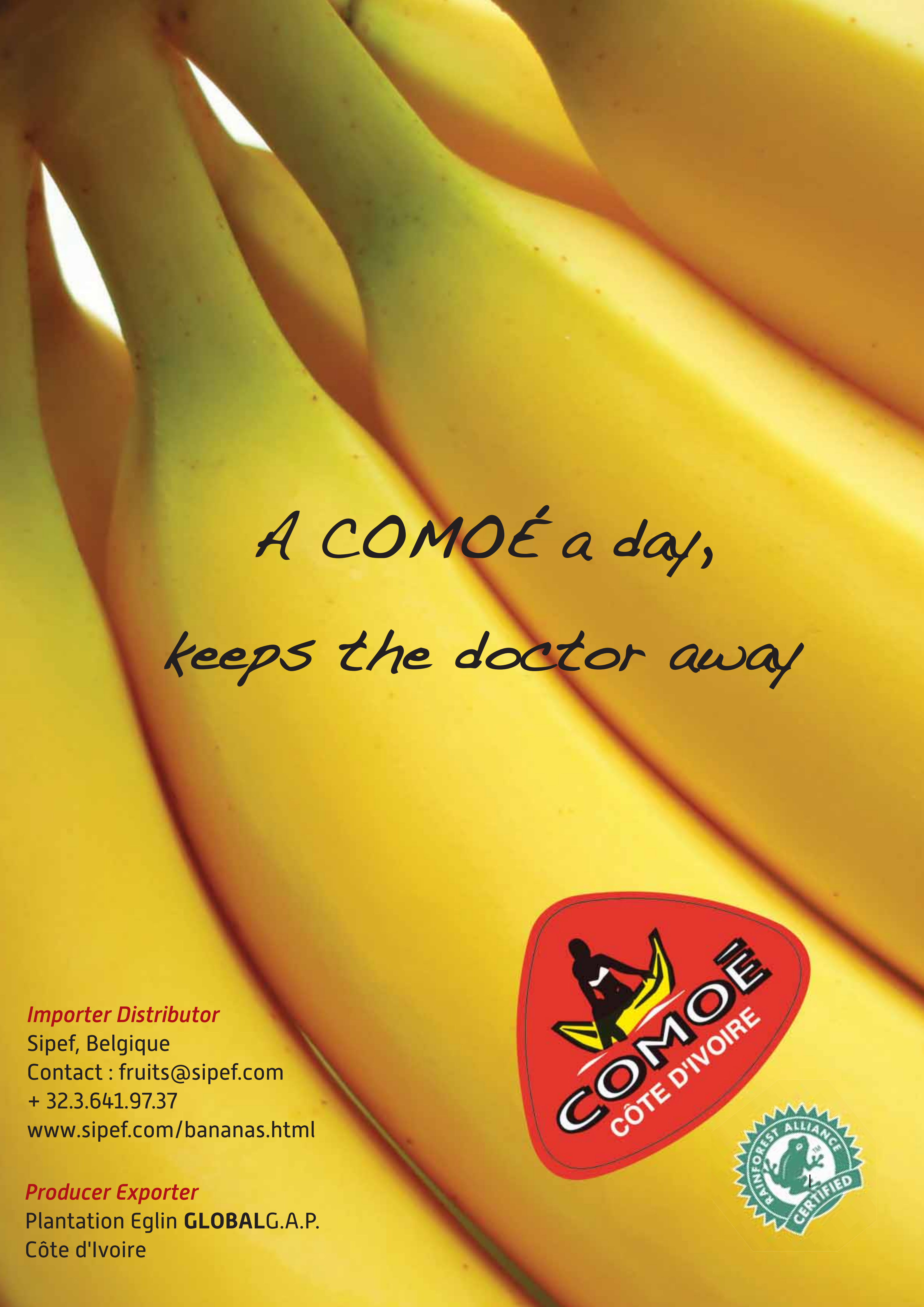
Banana
World market

Banana: still a crisis-free fruit?

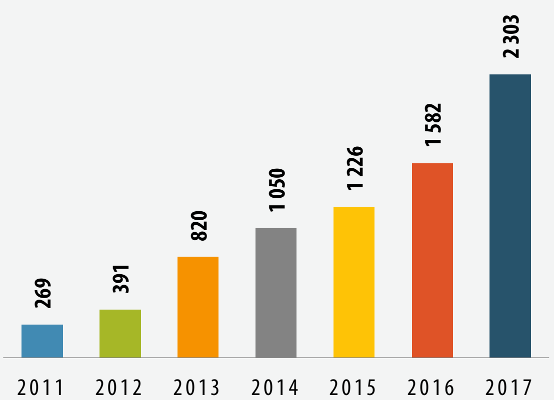
Ageism in consumption has gone out of fashion. The trend for novelty at any price and its corollary, planned obsolescence, have given way to the cult of *Musa*. The banana, the good old fresh product which has not seen any significant modification for more than half a century, has asserted itself as the absolute star of the fresh section, and more particularly the fruits and vegetables section. Long may it last!


A COMOÉ a day,
keeps the doctor away
COMOÉ
CÔTE D'IVOIRE
RAINFOREST ALLIANCE CERTIFIED
Importer Distributor
Sipef, Belgique
Contact : fruits@sipef.com
+ 32.3.641.97.37
www.sipef.com/bananas.html
Producer Exporter
Plantation Eglin GLOBALG.A.P.
Côte d'Ivoire

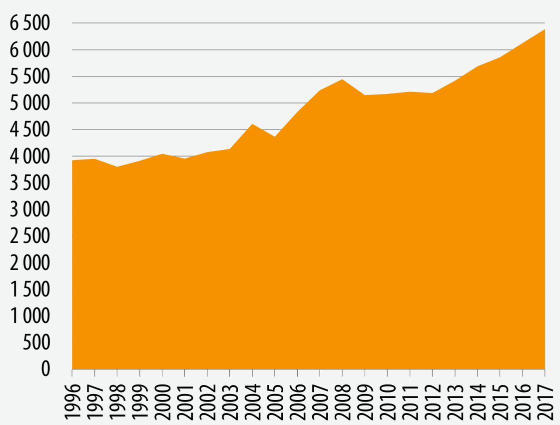
While 2017 was very volatile in terms of price (see **FruiTrop** 254, January 2018), all the indicators for consumption were at green. And if we look well beyond the scope of our analysis, focused on the EU, we find that this was a worldwide phenomenon. Indeed the import world should celebrate a very auspicious year. If we combine the consumption performances of the world's four main import centres (EU-28, USA/Canada, Japan and Russia), 2016-2017 saw an additional intake of more than 720 000 tonnes, i.e. a total of 13.7 million tonnes. The growth rate for the group as a whole was 6 %, and up to 14 % for Russia alone.

Below we will return to look at the supply to each of these zones in detail. But let's take advantage of this overview to take the analysis a little further. From a historical viewpoint, the same utopian view wins out. Without going back to time immemorial, but only 2011, it is indisputable that the consumption of these four zones swelled the world market by 2.3 million tonnes between 2011 and 2017. Every four years, demand from these countries have gone up by 1 million tonnes, i.e. 55 million boxes more entering the market.

Banana - Cumulative consumption surplus since 2010 in Japan, the USA, Russia, the EU and Canada
(in 000 tonnes / source: CIRAD)



Banana - EU - Net supply
(in 000 tonnes / source: Eurostat)



Dollar origins: the lion's share

Which origins are contributing to this solid upward trend? For the moment, it is the traditional Latin American origins which are feeding the machine. This zone has demonstrated unrivalled vitality. According to ITC, Ecuador exported more than one million additional tonnes between 2010-11 and 2017, going from 5.5 to 6.6 million tonnes. The performance in terms of absolute value (approximately 1 million additional tonnes to reach 2 million) was the same for Guatemala, though it had a much lower starting point. It is the banana country par excellence, for good but also for ill. On the good side, it has fantastic yields of 3 300 to 5 000 boxes per hectare! But on the bad side, there are the social and environmental conditions of production; it is far removed from agro-ecology and decent living conditions. The performances of Costa Rica (+ 19 % over the period 2011 to 2017) and Colombia (+ 7 %) are less dazzling, though there is growth. These four suppliers exported an additional 110 million boxes between 2011 and 2017, i.e. 2 million tonnes, the exact amount taken in by the major importer countries over this period.

With yields seeing big increases, even in already highly productive zones such as Costa Rica, there is a phenomenal leverage effect. This is demonstrated by Ecuador, where a gain of one tonne in exports per hectare instantly contributes to a surplus of 150 000 to 170 000 tonnes entering the world market. The same applies to Colombia, whose productivity is improving at a rate of knots, in particular through massive implementation of irrigation.

Compliance with the specifications
100 %

Availability
Year-round

Customer satisfaction

GETTING THE MATURITY RIGHT IS QUITE AN ART!

Our bananas put a smile on our customers' faces all year round,
because we work every day to supply them with the right product at the right time.

WWW.SOLYIMPORT.COM

Conception : J'articule

Other production zones are also on the move, such as Africa. While Cameroon does not seem to be taking off but rather consolidating a level of between 200 000 and 290 000 t in the long term, Côte d'Ivoire is exhibiting very high ambitions. In a way it is the new African banana Eldorado. However, we need to bear in mind the big picture. While Ivorian exports in the medium term reached half a million tonnes (currently 300 000 t), they represented just 10 % of the additional volumes entering the market from the four dollar suppliers between 2011 and 2017. Ghana is also on the upgrade, though again the orders of magnitude are a long way off the world leaders. As for the Dominican Republic (approximately 340 000 t at its height), it has ambitions but is yo-yoing because of recurrent climate damage curbing its growth. European production meanwhile is not seeking to expand its potential, but rather to maintain a low water mark of around 650 000 t. The rest of the Caribbean is in survival mode, and is no longer counting on the international market. Two ACP origins in Latin America (Belize and Surinam) are trying to maintain production between 150 000 and 160 000 t, but climate, phytosanitary or social difficulties are curbing their ambitions for the time being.

If there is one big loser, it is the Philippines. The production sector, concentrated on the island of Mindanao (south-east of the archipelago) combines numerous handicaps: disease problems (wilt, TR4), climate damage (typhoons) and political unrest. According to the FAO, this caused a fall in exports of one million tonnes between the 2011-2015 average and 2017, down to 1.7 million tonnes. Other sources announced less dramatic results. Yet although there are major difficulties of all kinds, we should make no mistake: the Philippines remains an essential production and supply region for Japan, China and more widely South-East Asia.

Finally, there are the newcomers, which are also old players. Panama, Honduras and Nicaragua have beaten export records (in terms of both volume and value), and big operators are announcing their return to production or expanded projects.

Banana — European Union — Evolution of supply – Tonnes

Year	Banana type or source			Sub-total	Exports	Net supply
	Community	ACP	Others ($)			
1996	684 605	798 109	2 471 263	3 953 977	30 598	3 923 379
1997	810 537	692 731	2 464 412	3 967 680	16 571	3 951 109
1998	786 232	614 459	2 426 419	3 827 110	26 448	3 800 662
1999	729 303	688 170	2 522 455	3 939 928	27 359	3 912 569
2000	782 176	770 095	2 528 170	4 080 441	35 327	4 045 114
2001	767 268	747 131	2 474 665	3 989 064	34 284	3 954 780
2002	790 622	738 439	2 554 508	4 083 569	8 011	4 075 558
2003	765 416	797 269	2 578 827	4 141 512	6 020	4 135 492
2004	758 206	782 979	3 077 361	4 618 546	11 029	4 607 517
2005	648 375	763 974	2 959 463	4 371 812	6 977	4 364 835
2006	641 559	889 176	3 306 538	4 837 273	7 839	4 829 434
2007	554 734	842 959	3 848 266	5 245 959	8 848	5 237 112
2008	567 560	918 923	3 968 269	5 454 752	9 636	5 445 115
2009	608 048	958 162	3 587 737	5 153 947	7 592	5 146 354
2010	659 525	1 023 664	3 492 406	5 175 595	7 151	5 168 445
2011	611 841	978 540	3 628 111	5 218 491	7 508	5 210 983
2012	648 459	982 336	3 559 785	5 190 580	5 236	5 185 344
2013	614 564	1 060 467	3 746 853	5 421 884	5 274	5 416 610
2014	655 980	1 081 268	3 956 190	5 693 438	6 423	5 687 015
2015	669 673	1 076 315	4 116 432	5 862 420	6 162	5 856 259
2016	**692 954**	**1 167 441**	**4 268 613**	**6 129 008**	**6 060**	**6 122 948**
2017	**585 582**	**1 099 695**	**4 706 762**	**6 392 039**	**6 815**	**6 385 223**
	(1)	(2)	(2)		(3)	

(1) 1988 to 1993 inclusive: Eurostat + European Commission data for Madeira and Greece. From 1994 onwards: supplementary aid data or POSEI.
(2) Eurostat data.
(3) Duty-paid bananas (released for free circulation) in one of the EU-28 member countries and then exported outside EU-28.
General note: before 1994: dessert bananas + plantains / From 1994 onwards: dessert bananas. Before 1995: EU-12 / From 1995 to 2003: EU-15 / From 2004 to 2006: EU-25 / From 2007 to 2013: EU-27 / From 2014: EU-28. The study concerns extra-Community import data for ACP and dollar bananas and re-exports. The rules of the Common Market Organisation of Banana (1993 version) have been applied to the date from 1988 onwards in order to give comparable results.
Source: Eurostat, European Commission / Processed by CIRAD Market News Service / Updated March 2018


THE FRENCH BANANA
IS COMING BACK!
For months, 600 independent French banana producers and all their employees rallied around to relaunch the production, always going towards total agroecology. Today, volumes are gradually returning to their normal levels, with always the same level of quality requirements and a renewed commitment to ethical agriculture.
Banane
DE GUADELOUPE
& MARTINIQUE
www.bananeguadeloupemartinique.com
UCPBAN RCS Fort-de-France 450 833 314 - Crédits Photo : UCPBAN / Robin Christol
cia com groupe

No questions asked: full steam ahead!

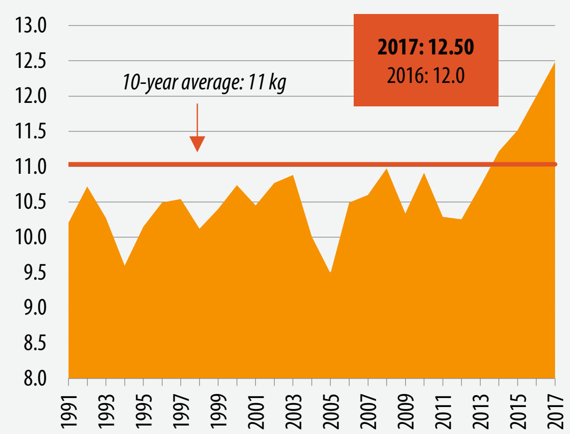
There is no mystery behind the sudden increase in world supply: it is a profitable sector. Local and transnational operators are investing to improve productivity (fertilisers, phytosanitary treatments, irrigation, etc.) and expand surface areas. Cheap labour (local and immigrant) is still available, although the agricultural sector is getting the cold shoulder from labourers across the board. And there is nothing to say that the system will seize up. The inexorable rise in both European and Russian spot prices in Q1 2018, reaching historic levels, reinforces the idea that the production system is under tension from strong demand, hence the massive investments in production.

The banana is an annual plant and its response to investment in production factors (especially amendments and pesticide treatments) is practically immediate, with an additional production volume. We can also observe the same speed of response when investment is withdrawn. We are in an upward phase, a production utopia fuelled by returns on investment universally deemed sufficiently high to feed the development cycle.

In terms of mergers and acquisitions, recent years have abounded in capitalistic manoeuvres, with the concentration phenomenon continuing in 2017. Readers will recall late 2014, which saw Chiquita purchased by Cutrale (a Brazilian orange juice sector operator), while Fyffes was eyeing up the American fruit giant. In late 2016, Fyffes was itself purchased by the Japanese company Sumitomo. In 2017 and 2018, Dole was coveted on all sides. First approached by the Belgian company Greenyard, it was ultimately the Irish company Total Produce which won out to form a giant of the fruit sector, with heavy involvement from both sides of the Atlantic, as well as direct control of its sourcing (as a producer) or via long-term agreements. Once the deal is done and if the pattern is followed, covetous eyes could turn to the last of the giants. We might also believe that intermediate sized companies will be the subject of plenty of attention, either as targets for purchase, or candidates for future acquisitions.

There is also a business strategy aspect in this production development. After partially or completely withdrawing from production, the big operators seem to be coming back in a big way. On the one hand, to respond to the growing contractualisation with the downstream segment, long completed in the USA and burgeoning in Europe, it is essential to control the supply. On the other hand, it is also the way for the challengers to the big transnationals to expand organically, rather than necessarily through merger and acquisition operations alone.

Banana - EU - Consumption
(in kg per capita / provisional data / sources: Eurostat, CIRAD)



Note: incl. EU enlargements

RipeLock™

an AgroFresh solution

Control the ripening progression of bananas during shipping, distribution and display.

The **RipeLock™ Quality System** is a revolutionary fruit quality management system specifically designed for the banana industry. This innovative system, a combination of a new generation MAP Bag and a special ethylene-control formulation (RipeLock Tabs 2.0), gives you perfect colour bananas, every day, and allows you flexible inventory management.

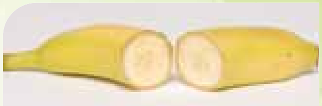
The proven benefits are clearly visible:

- Extended "yellow life" for bananas, less food waste
- Delayed development and reduced incidence of sugar spots
- Improved control on rots and molds
- Consumer preferred colour and taste

TRADITIONAL RIPENING

4 days after scheduled delivery to retailer

RIPELOCK™ TECHNOLOGY



4 days after scheduled delivery to retailer and removal from RipeLock Bag

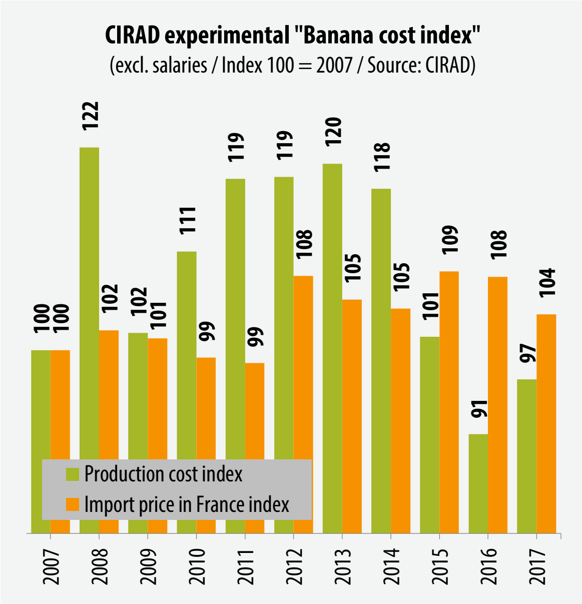
The RipeLock Quality System is now available in most EU countries. For more information visit **www.ripelock.eu** or contact our expert team:

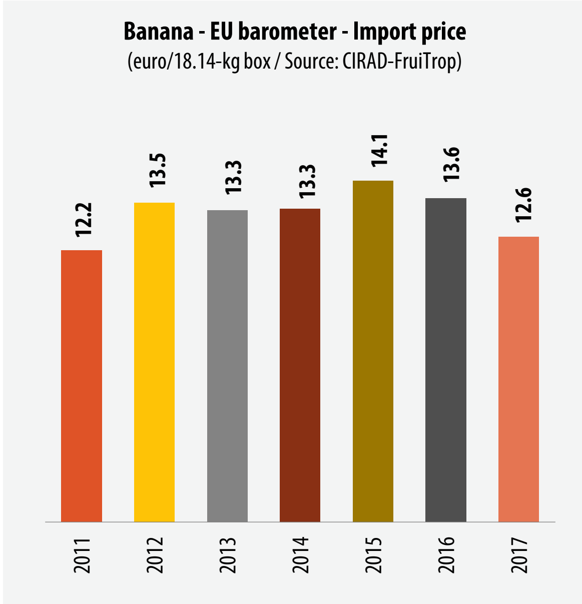
Ivan Van Dessel: ivandessel@agrofresh.com, +32 477 26 23 05
André Vink: avink@agrofresh.com, +31 651 98 74 77

AgroFresh

Advancing the future of freshness

Use plant protection products safely. Always read the label and product information before use.





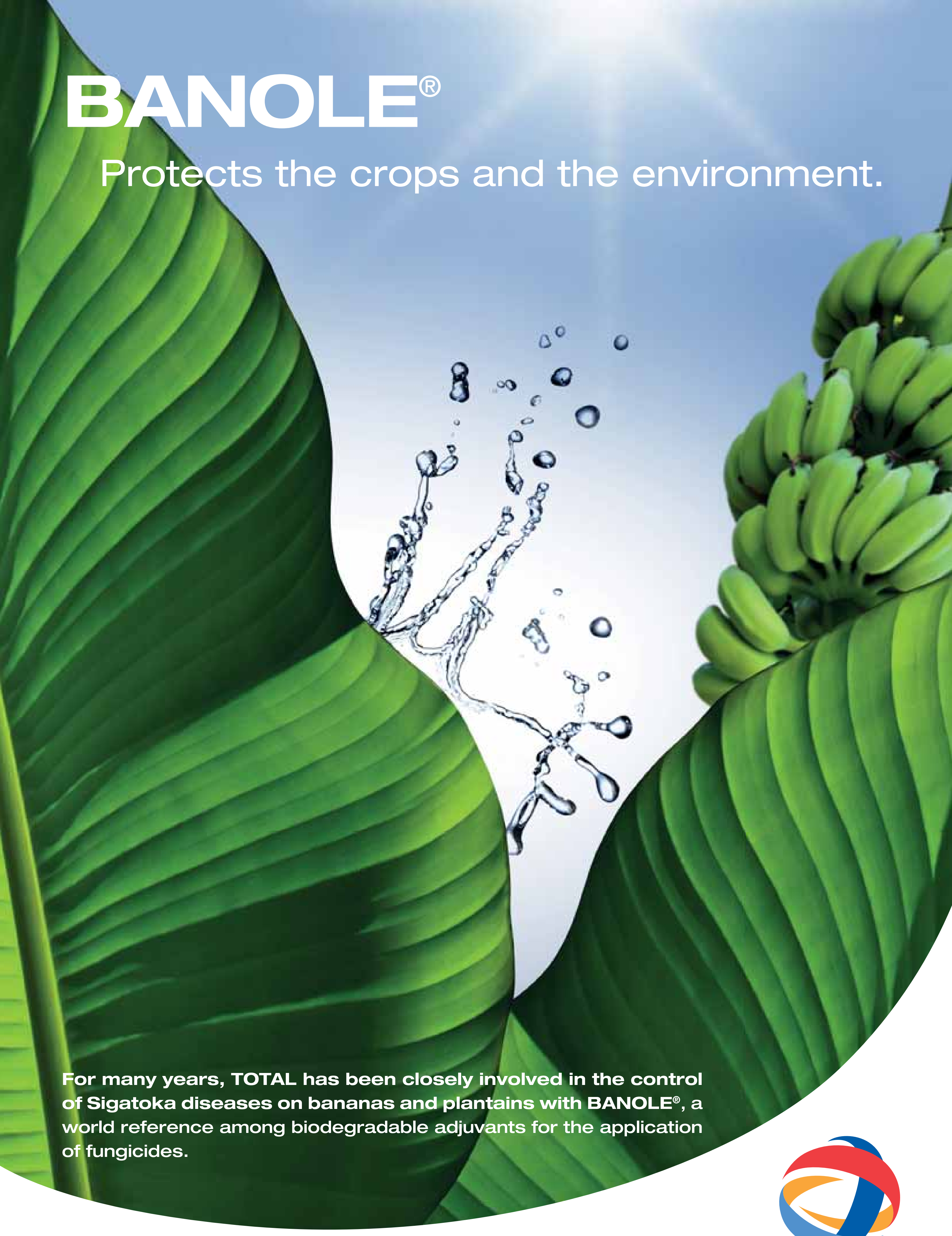
Production regains its spurs

One of the expected results of this business strategy is of course to have greater weight in the negotiations with the downstream segment, by virtue of volumes. Yet it also enable them to become essential players capable of organising the banana flow from one end of the supply chain to the other. Furthermore, the ripening players are exhibiting the same desire for greater control. The fever spike of Q1 2018 completely validates this strategy. Importers bound by contracts with the distribution sector, whose supply was cut off by independent producers which found it more profitable to sell on the spot market, were forced to buy volumes for a higher price to meet their commitments. Without a doubt, this episode definitely validated the upstream strategy of a large number of companies in the sector.


© Denis Loeillet

Finally, it enables some to diversify their geographic risks, offer their customers a complete range in terms of origins but also production modes (organic, conventional, certified, etc.), and so cover demand across the board. It is also the way to avoid being a follower in social and environmental innovations which will revolutionise the sector in the coming decade. The banana world of tomorrow is being built around two concepts, which meet two different demands: minimal production differentiation, with a minimal unit production cost, and innovative production which (re)builds value (social and environmental) and is better integrated into the local fabric. Yet they will still need to manage to earn market value from the new constraints on production, since the supermarket sector has no intention of giving in and increasing its purchase price, except where it can profit as in the highly promising organic sector.

In this context the Anglo-Saxon concept of "fabless" – i.e. a company with no factory – has partly established itself in the banana sector. The construction of a different product is based on a reality of different practices which must have a narrative (importance of the concept of "storytelling"). Nonetheless, let's not be naïve, poor social and environmental practices will not disappear. In certain regions, the banana sector is coming from a long way back, and the switch to a more sustainable system will not happen without the urging from downstream (distribution sector and consumers). In addition, it could be that the technical obstacles quite simply prevent sustainable production in certain zones.



www.totalspecialfluids.com

TOTAL


© Thierry Lescot

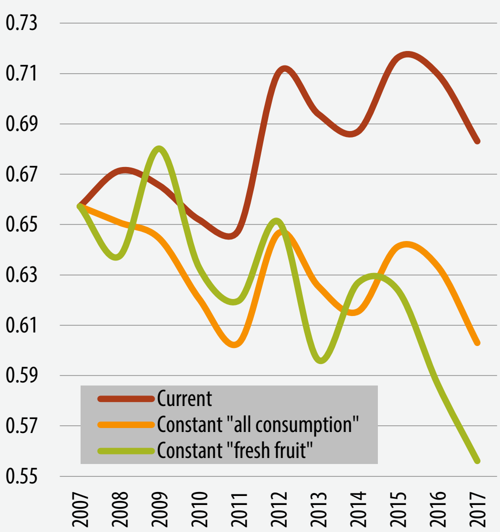
So why worry?

But let's come back to the short-term prospects. The banana market is in fine form, and no-one had imagined that Q1 2018 would go so well. Volumes on the up or maintaining high levels and sky-high prices have led many to forget the setbacks of 2017. Which is good for individual morale, but does not lend itself to rational thinking. **FruiTrop** will once again play the thankless role of party pooper. We would only reiterate the rule that has been proven time and again for more than a decade: the supply is regulated by climate damage. The novelty is when production damage goes unnoticed in terms of price levels. The destruction in autumn 2017 of part of the supplies from the Dominican Republic and Martinique, and the entire supply from Guadeloupe, did not even cause a quiver on the European price curve.

And we should not misjudge the spot price explosion in the 1st two months of 2018. Despite the production problems and cataclysmic announcements from the transnationals, consumption in the USA was up by 2 % over this period from 2017, while European consumption shrank by just 0.9 %. This poor performance by the EU should very much be put into context, since the supply levels were already very high in previous years. The surge in spot prices is due not to a weakness in supply, but to speculative behaviour from some of the upstream segment, and also to an acute and historic shortfall in the campaigns of the competing fruits (pip fruits and citruses).

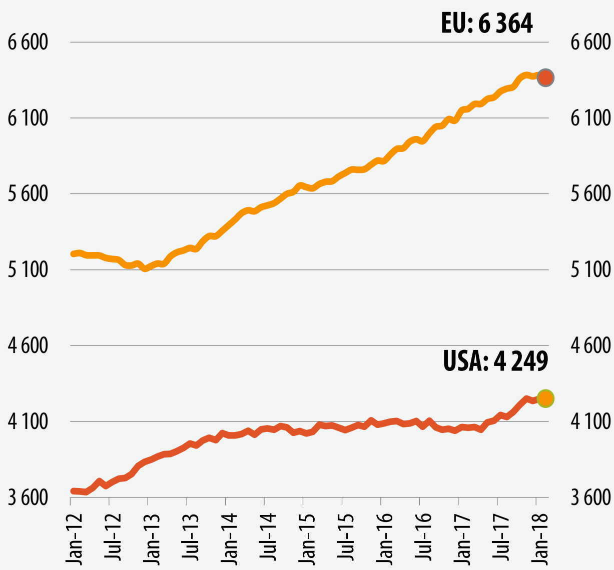
Hence the world production sector emerged from 2017 with full command of its capacities, which are constantly increasing. Thanks to the shortfalls of the other main fruits, to very good export flows to Russia, the EU and the United States, in short to a very positive trend in world demand, the sector is on cloud nine.

Banana - France - Import price on a current and constant basis
(in euro/kg / sources: CIRAD, INSEE)



Note: "all consumption" and "fresh fruit" deflators

Banana - EU & USA - Supply 12-month sliding basis (March to February)
(in 000 tonnes / sources: Eurostat, Customs, CIRAD)



Is there an expiry date for this optimism?

In cyclical terms, as at late April 2018, the sky was starting to cloud over: the Russian market came undone due to a deteriorating macroeconomic environment (US boycott, fall in the rouble, etc.) and without doubt slightly overanticipating consumption. The domino effect was almost immediate, and prices in Eastern Europe (especially in Poland) also came undone under the joint effects of poor anticipation of consumption and highly deteriorated quality of certain batches. Bit by bit, all the markets underwent this reversal in trend, with the contract operators, for their part, protected. Which is the last straw when we recall how they reacted when the European distribution sector, especially in Germany, imposed on them a price reduction during the renegotiations for 2018.

Once again, spring has been a high-risk period. The harvest forecast for stone fruits would have us believe that the season will get off to a light start in terms of volumes, thereby extending a lean strawberry campaign. This will doubtless be more problematic for the mid-season varieties, and so highly hazardous for the banana. The European market nosedived from the second half of April, and there is nothing to indicate that we will emerge from the zone of very high turbulence before the end of the summer, very much a classic tale. Just one question remains: to what level will prices fall?

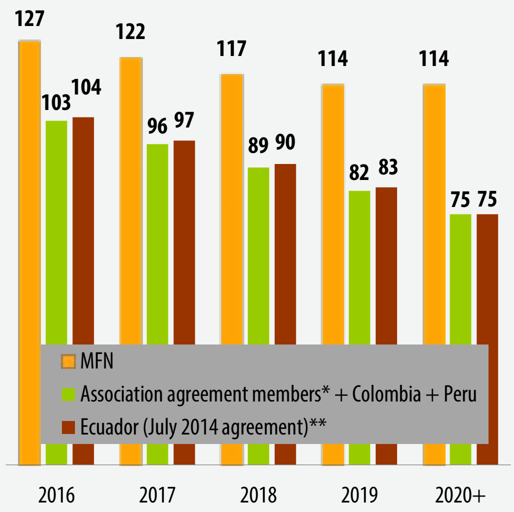
Besides the European supply of summer fruits, and the world supply of apples and pears, the ingredients remain the same: euro/dollar exchange rate still just as attractive for imports, freight cost, energy cost, etc. Talking of high stakes, the serious business will soon get going again. The basement customs duty of 75 euros/tonne on imports from the dollar zones will take effect in 2020, and these origins have no intention whatsoever of leaving it at that: a level of zero is still their ultimate aim. The ACPs understand this very well, and some are preparing for war, despite lacking any support or aid plans (end of BAM programme). European producers declared hostilities early, obtaining certain guarantees from the European institutions.

In summary, to avoid spoiling my image of a jolly inveterate pessimist, we cannot help but observe that we have gone from a market where climate vagaries regulated the banana supply, to a market where this is no longer enough, and we now need to count on a shortfall in other fruit sectors and on cold and rainy weather, for consumers to concentrate their demand on the banana alone. All the while of course banking on continuous market growth of 3 to 5 % per year (for the EU), as has been the case for the past five years.

So we might wonder about where we might go from here to maintain this dynamic. If I might add my two pennies' worth: light candles to Saint Anne, patron saint of carpenters, and ask her to take her time in preparing the four walls of the world banana market's coffin ■

Denis Lœillet, CIRAD
denis.loeillet@cirad.fr

Banana - EU - Customs duty for third countries excluding ACP (euro/tonne)



* Costa Rica, Panama, Honduras, Guatemala, Nicaragua, El Salvador
** Ecuador benefits from the agreement since 1st January 2017
Processed by Cirad-FruiTrop

Banana — EU-28 supply — 2017

in tonnes	AUT	BEL	LUX	GER	DEN	SPA	FIN	FRA	UK	GRE	IRE	ITA	NET	POR	SWE	BUL	CYP	CRO	CZE	EST	HUN	LAT	LIT	MAL	POL	ROM	SLO	SLK	Total
Intra-EU	**128 021**	**117 905**	**5 631**	**785 796**	**76 351**	**147 362**	**38 519**	**416 653**	**109 001**	**2 045**	**17 771**	**55 617**	**196 901**	**93 717**	**44 104**	**4 134**	**2 170**	**41 236**	**192 463**	**19 452**	**37 682**	**34 590**	**31 157**	**1 341**	**236 361**	**130 515**	**8 304**	**76 180**	**3 050 976**
MS-15, incl.	**127 768**	**117 905**	**5 631**	**784 034**	**76 351**	**147 023**	**38 515**	**416 161**	**109 000**	**1 943**	**17 641**	**52 850**	**193 544**	**93 471**	**44 104**	**1 203**	**2 170**	**12 940**	**178 209**	**7 532**	**25 176**	**19 034**	**15 561**	**1 222**	**231 145**	**80 737**	**7 738**	**36 916**	**2 845 519**
Belgium	32 411		5 436	438 557	195	6 978	457	209 644	8 521		994	3 415	78 681	3	12 498		0	1 427	62 421	731	2 391	6 340	2 361		72 872	28 636	156	15 824	**990 949**
Netherlands	47 175	79 282	71	324 576	8 676	3 254	23 871	30 827	3 169	1	25	12 203		1 189	8 524	142	150	5 890	45 969	485	403	5 338	5 157	5	95 677	11 785	1 753	2 411	**718 005**
Germany	41 094	24 269	75		54 045	64	13 809	8 151	1 191	3	1 439	292	97 702	0	10 093	0	0		36 703		2 171	5 318	2 360		44 520	2 594	10	6 689	**352 592**
France	6 984	1 056	40	12 431	0	123 176			3 601	2		33 361	3 603	1 305	39	19			25 858		10 491	1 884	5 552		14 512	24 016	800	7 712	**276 441**
Spain		11 434		5 083	8		2	28 510	22			1 780	3 159	90 607	198			152	217		659	135	128		1 021	538	51		**143 702**
UK		1 676		880	2	1 009		91 742		74	15 184	528	4 582		2 901			0	4 818			0	2		1 888	631	19	2 831	**128 768**
Ireland				1		1			92 216				159																**92 376**
Italy	105		0	58	1	1 247		43 599	81	1 863			2 396	368	26		2	5 099	2 117		24	20		1 217	519	3 019	2 668	1 448	**65 875**
Sweden		49		677	13 423	52	377	3 528					959	0					79						78				**19 220**
Austria		1		851	0							432	452				0	372			9 037				21		2 280		**13 447**
Greece				0	0				200			108	236			1 042	2 017									9 518			**13 122**
Portugal			9			11 240		18				731	671												38				**12 708**
Denmark		2		914				124					515		9 803				27										**11 385**
Finland				1	0								319		21					6 317		1							**6 659**
NMS, incl.	**253**			**1 762**	**0**	**339**	**4**	**492**	**1**	**102**	**129**	**2 767**	**3 358**	**246**		**2 931**		**28 296**	**14 254**	**11 920**	**12 507**	**15 556**	**15 597**	**120**	**5 217**	**49 778**	**566**	**39 265**	**205 457**
Poland	222			1 381	0	0		22	1			59	1 818	245		242			11 714			1 512	10 451			24 682		6 565	**58 914**
Czech Rep.	0			266	0			470					466					78			3 128		83		4 671	15 994	97	32 451	**57 703**
Slovenia	1											2 708	147			2 552		27 741	517		1 559	98			172	5 746		175	**41 417**
Latvia													82							10 685			5 063		142				**15 972**
Lithuania					0								88						240	1 235		13 909			169				**15 641**
Slovakia	13												91					26	753		7 781				21				**8 685**
Hungary	17					338							282					450	1 001						3	2 666		49	**4 806**
Bulgaria				112	0					22			110													690			**933**
Extra-EU	**829**	**1 290 962**	**0**	**628 743**	**5 831**	**158 843**	**75 409**	**317 342**	**1 024 442**	**177 637**	**73 154**	**702 306**	**722 996**	**85 788**	**167 196**	**34 082**	**3 055**	**20 187**	**2**	**1**	**0**	**0**	**22 878**	**8 497**	**210 871**	**2 071**	**73 291**	**0**	**5 806 412**
MFN, incl.	**829**	**958 817**	**0**	**616 886**	**1 473**	**146 362**	**75 205**	**41 151**	**663 267**	**177 637**	**45 019**	**688 425**	**707 504**	**85 366**	**124 368**	**34 082**	**3 055**	**20 187**					**22 878**	**8 456**	**210 392**	**2 071**	**73 291**		**4 706 720**
Ecuador	53	170 235		305 522	244	2 114	14 510	7 645	140 781	134 690	332	293 988	107 723	5 345	70 010	32 349	2 806	19 716					10 426	2 876	143 997	2 051	19 687		**1 487 100**
Colombia	777	495 385		87 810	777	33 680		31 600	275 770	20 282		213 167	148 823	31 195	11 489	1 244	228						39	4 627	20 403		35 199		**1 412 494**
Costa Rica		250 669		116 459	451	95 709	60 433	1 261	187 119	16 392	38 277	140 730	127 117	44 469	42 808	489	21	471					11 046	933	5 245		13 184		**1 153 282**
Panama				1 656			0		35 465	299	1 029	4 172	206 768		22														**249 411**
Peru		38 238		43 540		0	262	256	2 356			2 589	30 232	336															**117 808**
Guatemala		826		6 280		41			6 852	5 699	686	26 951	58 488										1 366		5 037		799		**113 023**
Nicaragua		410		44 949					4 691		114		609												35 710				**86 483**
Mexico		2 829		7 726		14 737			8 634		16	6 349	19 983	4 022	39								1	20		20	123		**64 497**
Honduras		209		2 934				383	1 142	275	4 540	146	3 819														4 300		**17 746**
Brazil		1		0					458				2 624	0															**3 082**
Philippines		16				80						318	530																**943**
China													233																**233**
USA													166																**166**
ACP, incl.		**332 145**		**11 857**	**4 358**	**12 480**	**204**	**276 190**	**361 176**		**28 135**	**13 881**	**15 492**	**422**	**42 828**				**2**	**1**				**41**	**479**				**1 099 692**
Africa		**222 348**		**3 231**	**0**	**8 497**		**274 315**	**139 632**		**0**	**8 696**	**49**	**418**	**1**				**2**	**1**					**0**				**657 191**
Côte d'Ivoire		81 347		3 157		8 457		153 118	68 272			1 506	0																**315 855**
Cameroon		121 835						105 288	36 093			7 090	1																**270 306**
Ghana		19 146						15 857	35 267			101	1																**70 373**
Angola						40							0	418															**459**
S. America		**45 804**				**3 842**			**53 177**		**26 078**		**0**																**128 900**
Belize		1 539				3 842			53 177		26 078		0																**84 635**
Surinam		44 265											0																**44 265**
Caribbean		**63 992**		**8 626**	**4 358**	**142**	**204**	**1 875**	**168 368**		**2 058**	**5 184**	**15 443**	**4**	**42 827**									**41**	**479**				**313 602**
Dom. Rep.		63 992		8 626	4 358	142	204	1 875	160 077		2 058	5 184	15 443	4	42 827									41	479				**305 311**
St. Lucia									8 291																				**8 291**

Note: 0 stands for less than 500 kg / Source: Eurostat, updated April 2018

Tissue culture production of tropical fruit plants

Your banana tissue culture plant specialist

A unique range of elite varieties

What we promise you

The most productive selected elite varieties

Prime bunch quality

Optimum homogeneity in the field

The best sanitary guarantees of the market

Unequalled responsiveness

Tel: +33 (0)4 67 55 34 58
Fax: +33 (0)4 67 55 23 05
vitropic@vitropic.fr

ZAE des Avants
34270 Saint Mathieu de Tréviers
FRANCE
www.vitropic.fr