

# Banana genetic diversity

by **Thierry Lescot**, CIRAD  
thierry.lescot@cirad.fr

Over a period of thousands of years, population migrations and movement of plant material have placed the banana in very different ecological contexts on the various continents. Growers have succeeded in harnessing the natural mutations resulting from vegetative multiplication. This combination of natural reproduction and selection by man since ancient times has resulted in the present genetic diversity.

Bananas originated in South-East Asia as wild semiferous plants. Natural crosses built up a large base of genetic diversity that still exists today. These crosses were the origin of the seedless varieties. These bananas have food qualities that soon interested man, who incorporated them in agriculture using their vegetative multiplication potential.

From the botanical point of view, the genus *Musa* is divided into semiferous species with inedible fruits and parthenocarpic varieties with fleshy seedless fruits. The *Eumusa* section includes *Musa acuminata* (genome symbol: A) and *Musa balbisiana* (genome symbol: B). These are wild species at the origin of the cultivated varieties.

The latter are classified according to their ploidy level and their genetic make-up. Some 1 200 varieties have been counted and classified around the world.

The inedible wild species with seed-containing fruits can be used for purposes other than human foodstuffs (fibre, livestock feed, etc.). They are all diploid (AA

and BB). About 180 have been counted to date, all from South-East Asia, but the census is not definitive (especially for the BBs). These fertile varieties are nonetheless important since they possess different levels of resistance to pests and diseases. They therefore form the base material for the various present and future conventional genetic improvement and varietal creation programmes. Numerous cultivars have been bred by man. They are classified in groups according to their genetic make-up and then in subgroups assembling the various cultivars derived from each other by natural mutation starting from a common genetic ancestor. Distinction is made between the following groups:

- diploid groups: AA (such as Figue sucrée or Frayssinette) and AB. These total about 290 cultivars grown mainly in South-East Asia where they originated;
- three triploid groups (at least 650 cultivars): AAA, AAB and ABB. The subgroups of each of these distinguish

between the dessert varieties richer in sugar at maturity, cooking varieties with fruits that are firm and not sweet even when ripe, and sometimes bananas for beer-making by fermentation of the pulp (East Africa).

Even if the plants within the same subgroup display only weak genetic diversity, they do have a great range of phenotypes, resulting essentially from mutations and many centuries of selection by man. This is the case for Cavendish (more than 20 cultivars), East African highland cooking and beer bananas (more than 150) and Central and West African plantain (more than 120) subgroups.

Although the intensive cultivation system used for approximately 25 percent of world production favours monovarietal production, it is important to remember that most production is based on less intensive family farming with the emphasis on varietal mixing. This contributes to continuing selection and hence ensures banana diversity ■

**Banana — Estimated world production in 2018**

in tonnes	Cooking bananas		Dessert bananas		Total
	Plantain AAB group	Highland bananas + ABB group + others	Cavendish	Gros Michel + others	
North America	0	1 000	3 174	100	4 274
Central America	1 067 015	75 150	8 420 215	86 500	9 648 880
South America	5 043 167	588 770	14 851 719	3 237 572	23 721 228
Caribbean	947 033	725 807	1 131 999	250 237	3 055 076
East Africa	871 972	8 601 414	4 459 934	865 413	14 798 733
West and Central Africa	11 535 372	1 181 646	3 158 792	461 633	16 337 443
North Africa and Middle East	58	9 867	2 944 030	73 184	3 027 139
Asia	1 496 597	9 903 770	43 640 799	12 353 646	67 394 812
Oceania	1 066	319 539	588 102	154 895	1 063 602
Europe	2	17	419 143	27	419 189
<b>Total world</b>	<b>20 962 282</b>	<b>21 406 980</b>	<b>79 617 907</b>	<b>17 483 207</b>	<b>139 470 376</b>

Source: Thierry Lescot - CIRAD according to references, surveys, professional sources, FAO, etc.

Production & trade 2018 data + 2019 imports exports (2018 data in italics) Estimates in tonnes	Production				Total	Exports		Imports	
	Cooking type		Dessert type			Cavendish	Plantain	Dessert banana	Plantain
	Plantains AAB	Highland bananas + ABB + other AAB + AAA + AA	Cavendish AAA	Gros Michel & other AA, AAA, AAB, ABB					
<b>North America</b>									
Canada					0	58	16	574 737	22 354
United States		1 000	3 174	100	4 274	593 626	23 192	4 676 916	377 290
Greenland					0			630	129
Saint Pierre & Miquelon								62	
<b>Total</b>	<b>0</b>	<b>1 000</b>	<b>3 174</b>	<b>100</b>	<b>4 274</b>	<b>593 684</b>	<b>23 208</b>	<b>5 252 345</b>	<b>399 773</b>
	0.0%	23.4%	74.3%	2.3%	100.0%	11.3%	2.2%		
<b>Central America</b>									
Belize	6 466	250	91 500	1 300	99 516	85 930	3		
Costa Rica	105 000	3 500	2 528 788	24 000	2 661 288	2 393 772	2 463	17 340	6 581
Guatemala	267 574	19 000	2 600 000	9 000	2 895 574	2 333 621	233 999	7 340	7 220
Honduras	103 455	9 000	671 251	9 000	792 706	633 446	1 071	14 708	21 464
Mexico	240 000	11 000	2 071 479	32 000	2 354 479	552 398	17 477	177	2
Nicaragua	227 520	25 000	180 000	4 500	437 020	136 129	58 548	1 786	208
Panama	82 000	6 900	268 798	6 100	363 798	227 400	676	20 528	2
El Salvador	35 000	500	8 399	600	44 499		2 198	70 045	77 149
<b>Total</b>	<b>1 067 015</b>	<b>75 150</b>	<b>8 420 215</b>	<b>86 500</b>	<b>9 648 880</b>	<b>6 362 696</b>	<b>316 435</b>	<b>131 924</b>	<b>112 626</b>
	11.1%	0.8%	87.3%	0.9%	100.0%	75.6%	29.7%		
<b>South America</b>									
Argentina			112 000	50	112 050			449 476	1 257
Bolivia	95 000	11 000	265 950	40 000	411 950	117 543	1 745		
Brazil	560 000	130 000	3 609 549	2 452 622	6 752 171	78 412	984	61	
Chile					0	25	10	252 004	16 295
Colombia	2 000 000	260 000	2 900 000	330 000	5 490 000	1 885 990	113 873	218	13 504
Ecuador	651 968	40 000	7 000 000	160 000	7 851 968	6 667 588	213 529		
Guiana	8 800	800	6 202	1 000	16 802				
French Guiana	3 000	500	2 000	2 500	8 000			2 300	
Falkland Isl.								30	24
Paraguay		310	75 868	4 400	80 578	66 730		55 000	87
Peru	1 200 000	125 000	510 000	120 000	1 955 000	218 246	1 312	4	
Suriname	14 399	1 000	41 835	7 000	64 234	19 146	190		
Uruguay					0	1	22	51 010	977
Venezuela	510 000	20 160	328 315	120 000	978 475	35	956	121	1 000
<b>Total</b>	<b>5 043 167</b>	<b>588 770</b>	<b>14 851 719</b>	<b>3 237 572</b>	<b>23 721 228</b>	<b>9 053 716</b>	<b>332 621</b>	<b>810 224</b>	<b>33 144</b>
	21.3%	2.5%	62.6%	13.6%	100.0%	61.0%	6.6%		
<b>Caribbean</b>									
Anguilla			2					100	100
Antigua & Barbuda	540	28	270	28	866			1 000	400
Netherlands Antilles	2	2	2	2	8	50		3 442	2 365
Aruba					0	4	3	1 710	2 069
Bahamas	3 400	170	3 800	240	7 610			2 016	798
Barbados	350	90	1 046	20	1 506	353		749	497
Bermuda	410	35	321	5	771	9		781	38
Cuba	200 000	489 319	45 000	226 925	961 244			147	167
Dominica	1 700	380	1 100	110	3 290	224	250		
Grenada	1 800	540	1 300	40	3 680		10		
Guadeloupe	3 867	400	51 000	300	55 567	43 215			100
Haiti	242 696	60 000	120 000	15 000	437 696	11	50	9 781	8 356
Cayman Isl.	21	1	187	8	217			986	63
Turks and Caicos Isl.	4	1	14	3	22			290	484
Virgin Isl. (USA)	280	70	900	80	1 330			310	60
Virgin Isl. (UK)	110	10	339	20	479			154	24
Jamaica	48 907	1 000	64 081	2 300	116 288	636	64		
Martinique	3 200	150	161 000	200	164 550	154 383			8
Montserrat	77	11	107	6	201				
Puerto Rico	78 621	2 000	74 345	500	155 466	3 300		300	700
Dominican Republic	350 000	170 000	590 000	3 500	1 113 500	375 000	218 042		
St. Kitts & Nevis					0			590	570
St. Vincent & Grenadines	2 440	450	1 600	320	4 810	100	360		
St. Lucia	3 400	700	12 500	550	17 150	9 694	500	1	
Trinidad & Tobago	5 208	450	3 085	80	8 823			9 000	5 243
<b>Total</b>	<b>947 033</b>	<b>725 807</b>	<b>1 131 999</b>	<b>250 237</b>	<b>3 055 076</b>	<b>586 979</b>	<b>219 279</b>	<b>31 257</b>	<b>22 042</b>
	31.0%	23.8%	37.1%	8.2%	100.0%	51.9%	23.2%		

Production & trade 2018 data + 2019 imports exports (2018 data in italics) Estimates in tonnes	Production				Total	Exports		Imports	
	Cooking type		Dessert type			Cavendish	Plantain	Dessert banana	Plantain
	Plantains AAB	Highland bananas + ABB + other AAB + AAA + AA	Cavendish AAA	Gros Michel & other AA, AAA, AAB, ABB					
<b>East Africa</b>									
South Africa	25	1 600	441 154	2 100	<b>444 879</b>	12 467		155 621	1 847
Botswana					<b>0</b>	1		11 000	5 076
Burundi	165 000	1 034 955	300 000	155 000	<b>1 654 955</b>	546	25	12	10
Comoros	2 000	10 000	31 277	3 500	<b>46 777</b>			7	
Djibouti		1	2		<b>3</b>			9 000	
Eritrea			15	2	<b>17</b>			16 000	
Ethiopia	110	1 100	504 403	2 400	<b>508 013</b>	6 311			
Reunion Isl.	11	510	6 745	3 200	<b>10 466</b>				
Kenya	33 013	328 000	410 000	80 000	<b>851 013</b>	19	17	2 510	250
Lesotho					<b>0</b>			1 233	2 256
Madagascar	36 000	13 000	321 522	13 000	<b>383 522</b>	94	18		
Malawi	72 000	19 000	76 000	9 000	<b>176 000</b>			3 438	252
Mauritius	12	620	7 333	780	<b>8 745</b>			100	
Mayotte	610	6 700	6 500	1 100	<b>14 910</b>				
Mozambique	31 000	4 300	401 000	1 100	<b>437 400</b>	91 446	200	18	2
Uganda	190 000	3 110 377	150 000	355 000	<b>3 805 377</b>	547	1 087	37	1 100
Rwanda	174 000	1 325 007	180 000	60 000	<b>1 739 007</b>	139		65	770
Seychelles	80	319	1 488	100	<b>1 987</b>			2	
Somalia	3 100	900	20 905	1 800	<b>26 705</b>			8 800	17
Sudan		1 000	949 233	1 000	<b>951 233</b>	190 000		725	950
Western Sudan	5	320	154 000	600	<b>154 925</b>			1 000	
Swaziland	5	4	6 847	1	<b>6 857</b>	500		3 752	54
Tanzania	151 000	2 743 091	400 000	175 000	<b>3 469 091</b>	2 120	663	1	1
Zambia	1	60	652	80	<b>793</b>			4 874	
Zimbabwe	14 000	550	90 858	650	<b>106 058</b>	3 704	2		
<b>Total</b>	<b>871 972</b>	<b>8 601 414</b>	<b>4 459 934</b>	<b>865 413</b>	<b>14 798 733</b>	<b>307 894</b>	<b>2 012</b>	<b>217 595</b>	<b>12 585</b>
	5.9%	58.1%	30.1%	5.8%	100.0%	6.9%	0.2%		
<b>West and Central Africa</b>									
Angola	120 000	10 000	420 000	15 700	<b>565 700</b>	4 000		1	120
Benin	30 000	500	22 167	3 000	<b>55 667</b>		20	9 000	3 600
Burkina Faso	100	10	40 000	10	<b>40 120</b>	1		22 000	4 727
Cameroon	1 900 000	200 000	460 000	200 000	<b>2 760 000</b>	200 000	150 000		
Cape Verde	10	30	9 439	30	<b>9 509</b>			28	33
Congo	68 456	3 000	38 000	3 000	<b>112 456</b>			21	2 000
Congo (Dem. Rep.)	2 400 000	620 000	309 916	112 000	<b>3 441 916</b>	37	5 000	9	1
Côte d'Ivoire	1 596 012	120 000	700 000	6 000	<b>2 422 012</b>	400 000	27 035		1
Gabon	81 000	10 000	17 216	2 000	<b>110 216</b>			300	10 000
Gambia	12	5	4 000	5	<b>4 022</b>			5 000	30
Ghana	1 985 000	50 000	294 000	15 000	<b>2 344 000</b>	100 000	300	31	80
Guinea	471 159	22 000	225 350	12 000	<b>730 509</b>	1 200	26		
Guinea Bissau	43 454	4 000	8 600	487	<b>56 541</b>	2			
Equatorial Guinea	19 770	3 000	6 400	2 000	<b>31 170</b>			2 500	27 000
Liberia	50 321	7 800	33 000	5 100	<b>96 221</b>			1 000	300
Mali	6 500	500	179 511	500	<b>187 011</b>	34		19 718	7 000
Mauritania		1	70	1	<b>72</b>			12 000	
Namibia					<b>0</b>			4 061	2 029
Niger			450		<b>450</b>			13 000	5 973
Nigeria	2 598 872	125 000	290 000	80 000	<b>3 093 872</b>	18		201	9 000
Central African Rep.	86 683	1 500	26 000	1 800	<b>115 983</b>				1 800
St Helena								12	1
Sao Tomé & Príncipe	2 900	900	2 300	1 100	<b>7 200</b>				
Senegal	200	100	30 541	100	<b>30 941</b>	22		35 281	600
Sierra Leone	45 923	2 000	15 000	1 000	<b>63 923</b>			10	14
Chad			12		<b>12</b>			16 000	1 600
Togo	29 000	1 300	26 820	800	<b>57 920</b>	207	1	3	180
<b>Total</b>	<b>11 535 372</b>	<b>1 181 646</b>	<b>3 158 792</b>	<b>461 633</b>	<b>16 337 443</b>	<b>705 521</b>	<b>182 382</b>	<b>140 176</b>	<b>76 089</b>
	70.6%	7.2%	19.3%	2.8%	100.0%	22.3%	1.6%		
<b>North Africa — Middle East</b>									
Algeria		1	308	10	<b>319</b>			168 916	500
Saudi Arabia			5		<b>5</b>	8 151		295 000	
Bahrain			946	50	<b>996</b>	1		14 000	
West Bank		5	3 118	5	<b>3 128</b>			16 000	20
Egypt	3	3 000	1 320 196	65 000	<b>1 388 199</b>	297		3 870	989
United Arab Emirates			203	1	<b>204</b>	6 546		177 245	
Iraq			10		<b>10</b>			305 513	41
Iran		3 000	125 170	3 000	<b>131 170</b>			432 027	
Israel		1 000	133 000	1 000	<b>135 000</b>			139	7
Jordan		300	41 298	500	<b>42 098</b>	258		19 813	7
Kuwait					<b>0</b>	30 000		100 707	479
Lebanon	5	450	70 420	750	<b>71 625</b>	42 853		1 531	4
Libya		1	2	1	<b>4</b>			8 636	11
<b>sub-total (ctnd on next page)</b>	<b>8</b>	<b>7 757</b>	<b>1 694 676</b>	<b>70 317</b>	<b>1 772 758</b>	<b>88 106</b>	<b>0</b>	<b>1 543 397</b>	<b>2 058</b>

Production & trade 2018 data + 2019 imports exports (2018 data in italics) Estimates in tonnes	Production				Total	Exports		Imports	
	Cooking type		Dessert type			Cavendish	Plantain	Dessert banana	Plantain
	Plantains AAB	Highland bananas + ABB + other AAB + AAA + AA	Cavendish AAA	Gros Michel & other AA, AAA, AAB, ABB					
<b>North Africa — Middle East (cont'd and end)</b>									
Morocco	20	100	319 730	100	<b>319 950</b>	116		23 271	4 559
Oman	10	1 750	14 205	2 300	<b>18 265</b>	316		31 177	1 564
Qatar					<b>0</b>			35 000	
Western Sahara					<b>0</b>			2 700	
Syria			154	2	<b>156</b>	28		43 000	1 150
Tunisia		10	55	50	<b>115</b>	11		39 571	319
Turkey		50	798 888	115	<b>799 053</b>	10	16	122 117	142
Yemen	20	200	116 322	300	<b>116 842</b>	1 081		1 300	
<b>Total</b>	<b>58</b>	<b>9 867</b>	<b>2 944 030</b>	<b>73 184</b>	<b>3 027 139</b>	<b>89 668</b>	<b>16</b>	<b>1 841 533</b>	<b>9 792</b>
	0.0%	0.3%	97.3%	2.4%	<b>100.0%</b>	3.0%	0.0%		
<b>Asia</b>									
Afghanistan					<b>0</b>			130 000	
Azerbaijan					<b>0</b>			39 782	1
Bangladesh	13 000	120 000	461 347	216 000	<b>810 347</b>	71	200		
Bhutan	71	520	3 000	560	<b>4 151</b>				2
Brunei		46	1 500	276	<b>1 822</b>			7 287	
Cambodia	2 000	40 000	144 403	12 000	<b>198 403</b>	27 490		2	
China	1 100	559 000	9 921 600	740 000	<b>11 221 700</b>	23 432		1 939 946	27
South Korea					<b>0</b>	9		540 000	36
North Korea					<b>0</b>			4 743	
Hong Kong					<b>0</b>	1 729		92 000	5
India	1 250 000	2 200 000	19 658 000	7 700 000	<b>30 808 000</b>	175 306	634		
Indonesia	71 000	2 050 000	3 943 383	1 200 000	<b>7 264 383</b>	15 152	15 221	1	
Japan			51		<b>51</b>			1 400 000	700
Kazakhstan					<b>0</b>	361		44 914	
Kyrgyzstan					<b>0</b>	221		19 458	
Laos	1 000	65 000	289 000	153 000	<b>508 000</b>	250 000		628	
Macau					<b>0</b>			3 451	
Malaysia	21 000	81 000	179 589	95 000	<b>376 589</b>	23 983		28 103	64
Maldives	80	220	334	210	<b>844</b>			2 008	10
Mongolia					<b>0</b>			2 814	92
Myanmar	21 000	370 000	595 994	240 000	<b>1 226 994</b>	119 790	200	1	
Nepal	10	22 000	216 393	16 000	<b>254 403</b>			29 795	408
Uzbekistan					<b>0</b>			23 607	
Pakistan	20	1 000	990 000	1 400	<b>992 420</b>	69 244			
Philippines	11 000	3 203 411	4 844 374	1 500 000	<b>9 558 785</b>	4 115 516	938	1	
Singapore					<b>0</b>	245		54 159	376
Sri Lanka	82 206	293 033	245 000	58 000	<b>678 239</b>	7 904	400		
Tajikistan					<b>0</b>			11 397	63
Taiwan		500	354 738	1 000	<b>356 238</b>	1 110			
Thailand	21 000	300 000	564 352	160 000	<b>1 045 352</b>	23 856	41	20 284	
East Timor	10	40	566	200	<b>816</b>				
Turkmenistan					<b>0</b>			36	
Vietnam	2 100	598 000	1 227 175	260 000	<b>2 087 275</b>	130 000	570	35 832	30
<b>Total</b>	<b>1 496 597</b>	<b>9 903 770</b>	<b>43 640 799</b>	<b>12 353 646</b>	<b>67 394 812</b>	<b>4 985 419</b>	<b>18 204</b>	<b>4 430 249</b>	<b>1 814</b>
	2.2%	14.7%	64.8%	18.3%	<b>100.0%</b>	11.4%	1.2%		
<b>Oceania</b>									
Australia	20	70	333 041	40 800	<b>373 931</b>	124		51	8
Fiji	100	650	4 888	390	<b>6 028</b>	2			
Guam		90	354		<b>444</b>	5		1 000	
Cook Isl.		22	30	10	<b>62</b>				
Northern Mariana Islands					<b>0</b>			433	
Marshall Isl.					<b>0</b>			190	3
Solomon Isl.		512	313	90	<b>915</b>			1 000	
Kiribati		3 500	4 439	400	<b>8 339</b>				
Micronesia	200	307	1 514	14	<b>2 035</b>				
Nauru	1	25	100	15	<b>141</b>			1	
Niue		10	66	5	<b>81</b>				
New Caledonia	42	1 520	1 541	110	<b>3 213</b>			1 100	
New Zealand					<b>0</b>	15		93 217	100
Palau					<b>0</b>			90	
Papua New Guinea	500	290 000	220 000	110 000	<b>620 500</b>				
French Polynesia		800	2 400	500	<b>3 700</b>			6	
Samoa		13 000	9 478	80	<b>22 558</b>	35		1	
Samoa (USA)	2	248	524	70	<b>844</b>				
Tokelau		5	10	1	<b>16</b>			4	
Tonga	100	2 249	677	100	<b>3 126</b>			24	4
Tuvalu	1	121	150	20	<b>292</b>				
Vanuatu	100	6 100	8 387	2 200	<b>16 787</b>	4			
Wallis & Futuna		310	190	90	<b>590</b>				
<b>Total</b>	<b>1 066</b>	<b>319 539</b>	<b>588 102</b>	<b>154 895</b>	<b>1 063 602</b>	<b>185</b>	<b>0</b>	<b>97 117</b>	<b>115</b>
	0.1%	30.0%	55.3%	14.6%	<b>100.0%</b>	0.0%	0.0%		

Production & trade 2018 data + 2019 imports exports (2018 data in italics) Estimates in tonnes	Production				Total	Exports		Imports	
	Cooking type		Dessert type			Cavendish	Plantain	Dessert banana	Plantain
	Plantains AAB	Highland bananas + ABB + other AAB + AAA + AA	Cavendish AAA	Gros Michel & other AA, AAA, AAB, ABB					
<b>Europe</b>									
Azores			1 000		1 000				
Albania					0			20 815	
Germany					0	279 681	61	1 270 422	10 614
Andorra					0			700	
Armenia					0	11		21 212	1
Austria					0	14 870	6	143 606	321
Belarus					0	58		73 622	
Belgium					0	919 934	13 256	1 145 797	31 940
Bosnia Herzegovina					0			52 487	135
Bulgaria					0	867	38	47 184	21 327
Canaries	1	5	387 873	5	387 884	349 796			
Cyprus			3 841	5	3 846		4	6 597	1 767
Croatia					0	6 062		76 780	1 147
Denmark					0	10 711	11	71 381	329
Spain			250	5	255	136 246	2 379	702 377	30 155
Estonia					0	9	1	18 680	3
Finland					0	4 228		110 172	113
France					0	204 728	1 720	670 437	26 347
Georgia					0	182		29 473	1
Gibraltar					0			198	3
Greece		2	2 353	2	2 357	52 720	3 070	208 783	6 117
Hungary					0	1 761	11 743	41 158	29 863
Faroe Isl.					0			2 294	
Ireland					0	2 227	803	93 374	7 792
Iceland			1		1	6		3 521	300
Italy			337		337	76 230	3 359	731 047	26 720
Latvia					0	19 689		43 517	60
Lithuania					0	11 673	1 683	43 755	3 632
Luxembourg					0	299		6 384	711
Macedonia					0	7	18	22 000	500
Madeira	1	10	23 248	10	23 269	19 000			29
Malta					0			9 307	46
Moldova					0	60		13 884	489
Montenegro					0			12 429	123
Norway					0	40		82 638	416
Netherlands					0	911 803	27 682	1 270 003	55 530
Poland					0	64 995	1 400	443 583	13 813
Portugal			240		240	24 006	1 528	204 098	1 759
Czech Republic					0	53 596	1	182 791	1 872
Romania					0	2 237		166 838	44 297
United Kingdom					0	7 815	18 344	1 011 408	51 360
Russia					0	73 778		1 512 443	4
San Marino					0			280	
Serbia					0	118		77 353	3
Slovakia					0	26 220	152	79 958	10 033
Slovenia					0	56 559	7	91 526	80
Sweden					0	31 935	1	188 747	1 645
Switzerland					0	12		95 190	2 032
Ukraine					0	28		250 923	2
<b>Total</b>	<b>2</b>	<b>17</b>	<b>419 143</b>	<b>27</b>	<b>419 189</b>	<b>3 364 197</b>	<b>87 267</b>	<b>11 351 172</b>	<b>383 431</b>
	0.0%	0.0%	100.0%	0.0%	100.0%	29.6%	0.8%		296 164
<b>Total world</b>	<b>20 962 282</b>	<b>21 406 980</b>	<b>79 617 907</b>	<b>17 483 207</b>	<b>139 470 376</b>	<b>26 049 959</b>	<b>1 181 424</b>	<b>24 303 592</b>	<b>1 051 411</b>
	15.0%	15.3%	57.1%	12.5%	100.0%				

**Note 1:** for EU members, imports of Cavendish from third countries only, not counting intra-Community trade or European produce supplies.

**Note 2:** differences between import and export totals result from re-exports between non-producer countries (intra-EU trade for example), taking into account two years (2015 and 2016) and the experimental nature of this work.

**Source:** Thierry Lescot of CIRAD, who used bibliographical research, surveys, professional sources, FAO, etc.





# Weekly banana market report

Comprehensive and relevant European market monitoring

- Production trends
- Detailed review of the main European markets
- Detailed import prices for each market
- Supply levels



Annual subscription price: €3 000 pre-VAT  
(approx. 48 editions per year)

E-mailed out on Thursdays

Contact: [info@fruitrop.com](mailto:info@fruitrop.com)

or [www.fruitrop.com/en/ciradshop/subscribe](http://www.fruitrop.com/en/ciradshop/subscribe)

**FRUITROP**  
weekly

