

European apple crop 2019/2020

Philippe Binard
World Apple and Pear Association
(WAPA)

Prognosfruit cares about:

- ✓ Being reliable, transparent and accountable
- ✓ Looking what is behind the figures and closely cooperate with those close to production for both quantitative and qualitative information => it is a team work
- ✓ Updating and reviewing data permanently but follow up production data with NH stocks depletion information
- ✓ Looking beyond the EU and get a global outreach
- ✓ Providing only aggregate data in line with Commission market transparency practices, allowing operators to take informed decisions
- ✓ Most of Qlickfresh graphic to be look from right to left !

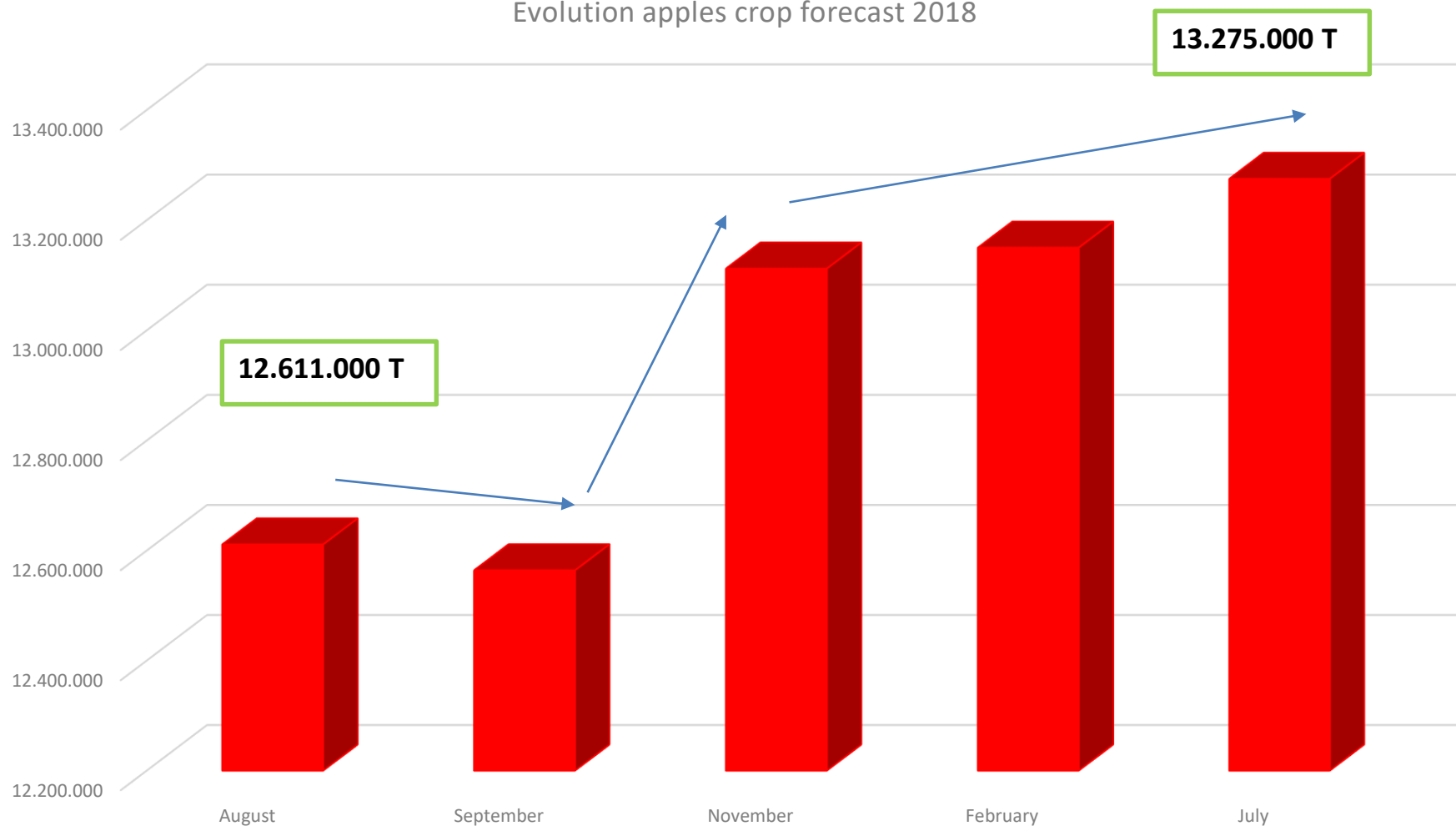
REVIEW SEASON 2018/2019

Review 2018 forecast

(Source: Prognosfruit)



Evolution apples crop forecast 2018



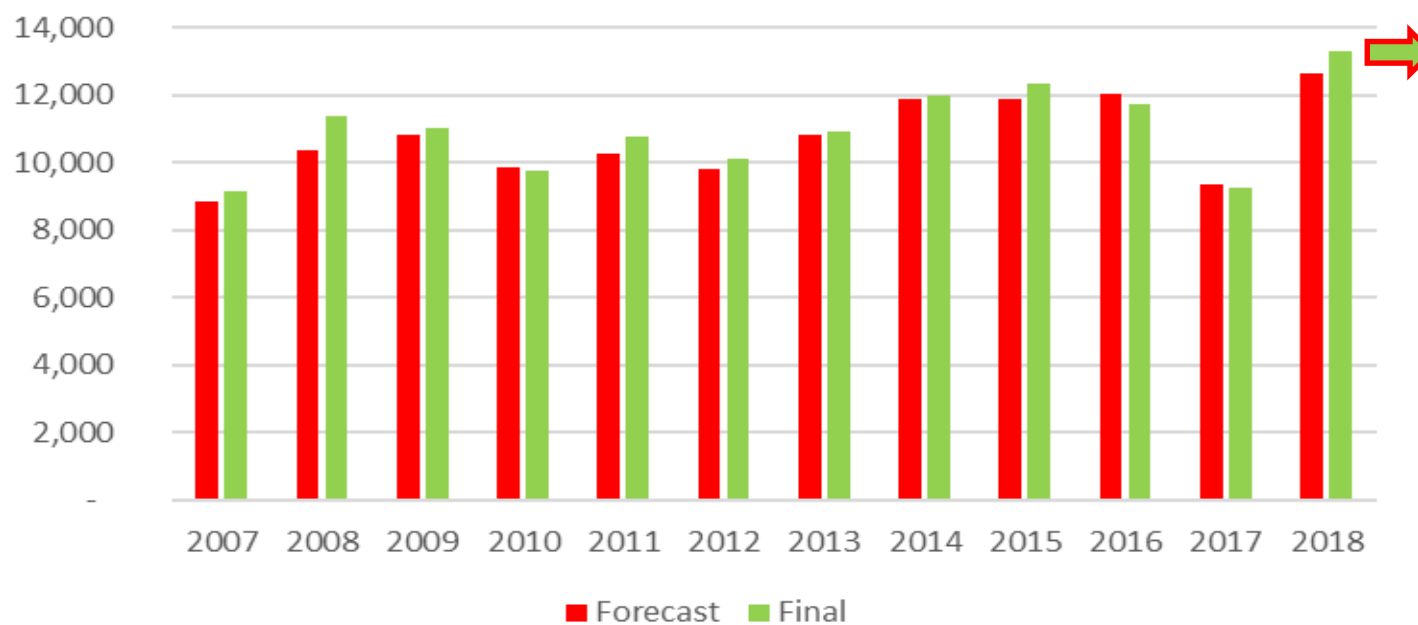
Validation 2018 forecast

(Source Prognosfruit)



$$\boxed{12,611,000 \text{ T}} + \text{663,000 T} + 5\% = \boxed{13,275,000 \text{ T}}$$

Trends forecast versus final



YEAR	VAR %	VAR VOL
2008	10%	1048
2018	5%	664
2011	5%	512
2015	4%	432
2012	3%	295
2007	3%	266
2009	2%	216
2013	1%	131
2014	1%	81
2017	-1%	-92
2010	-1%	-95
2016	-2%	-259

Forecast v. final data 2018 (country)

(Source: Prognosfruit)



+330.000 T



+105.000 T



+103.000 T



+64.000 T



+54.000 T



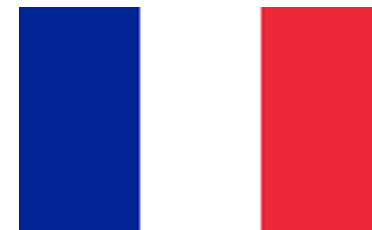
+15.000 T



+14.000 T



+663.000 T

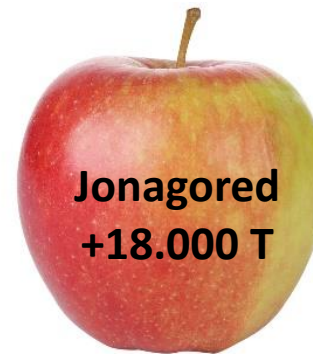


-25.000 T



-22.000 T





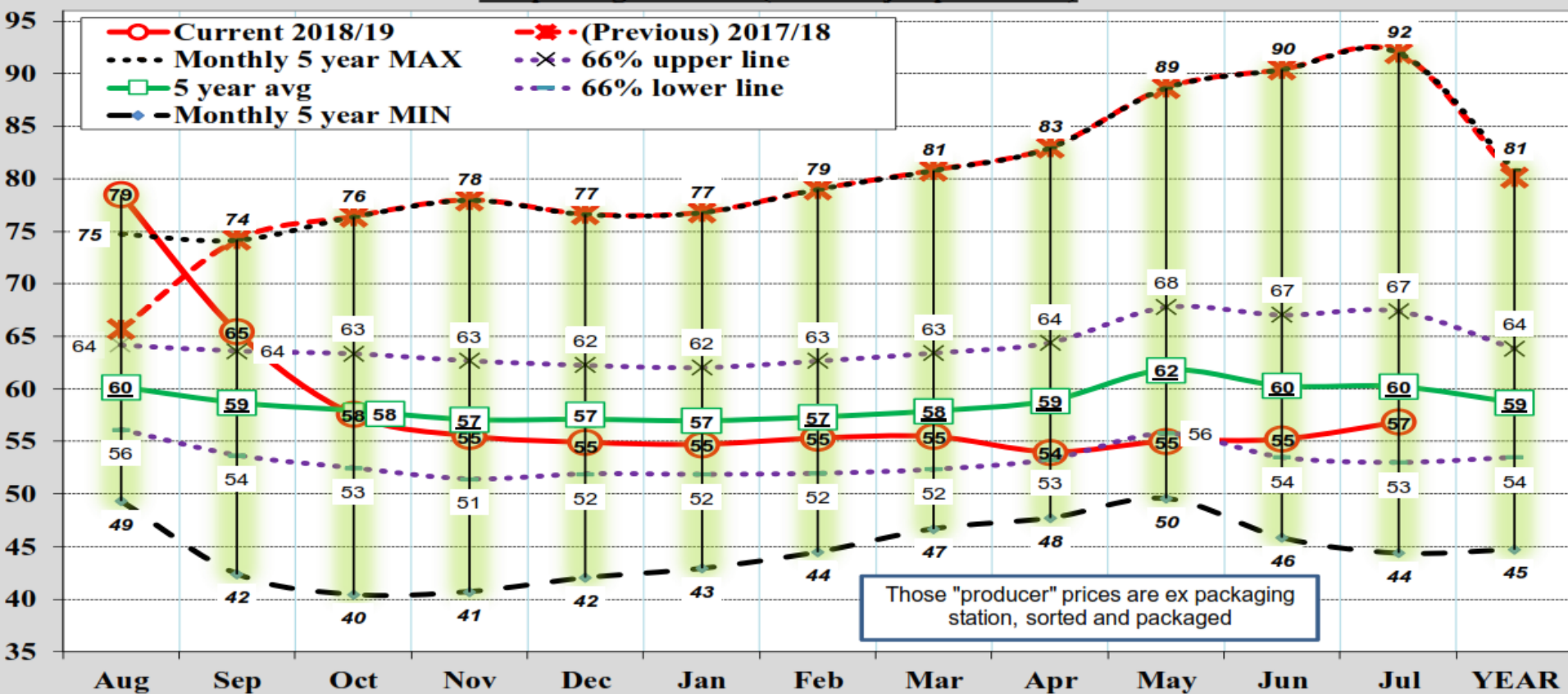


Market summary

€/100 kg

Apple prices in the EU (€/100kg=Euro cents/kg)

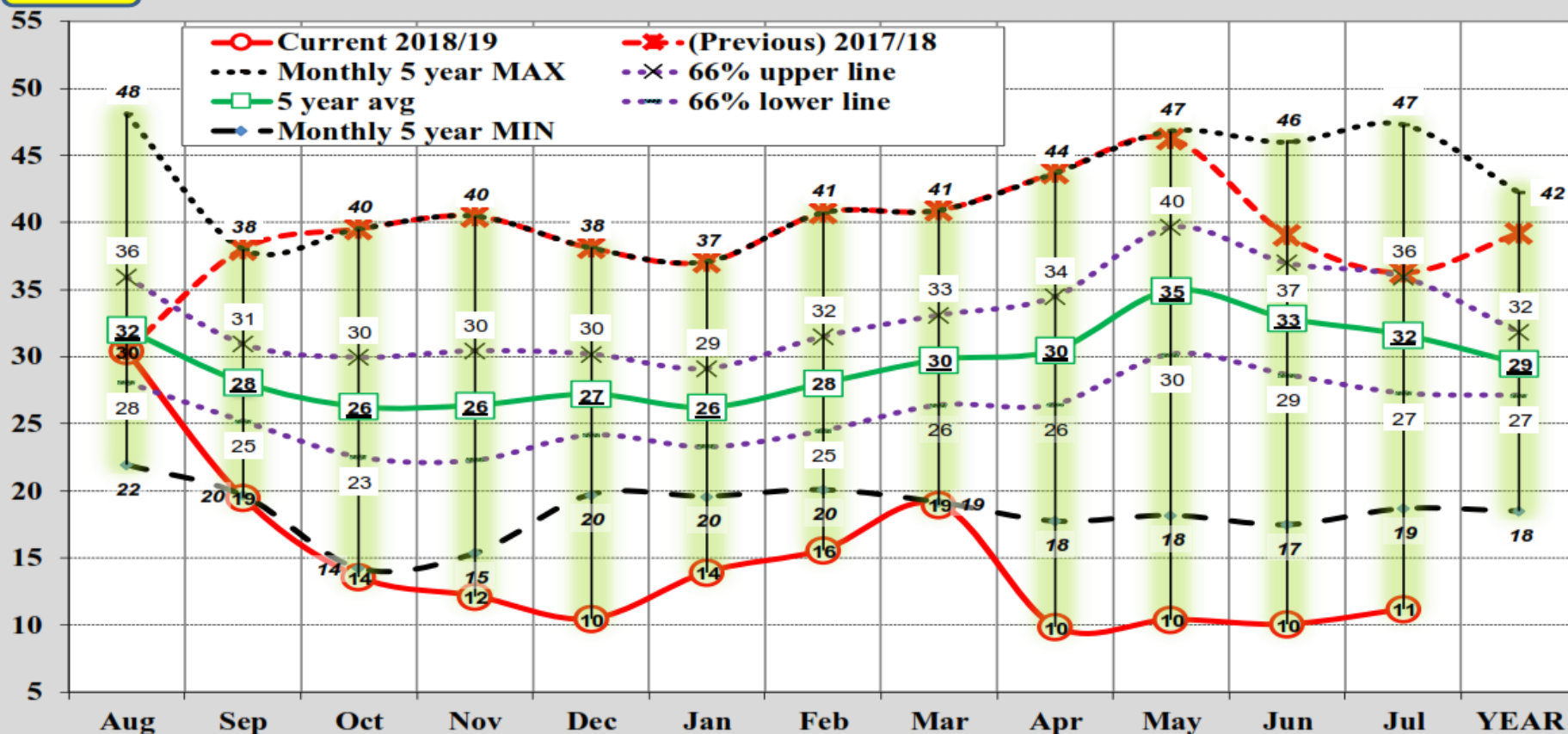
Simple avg of 4 MSs (the 4 major producers)

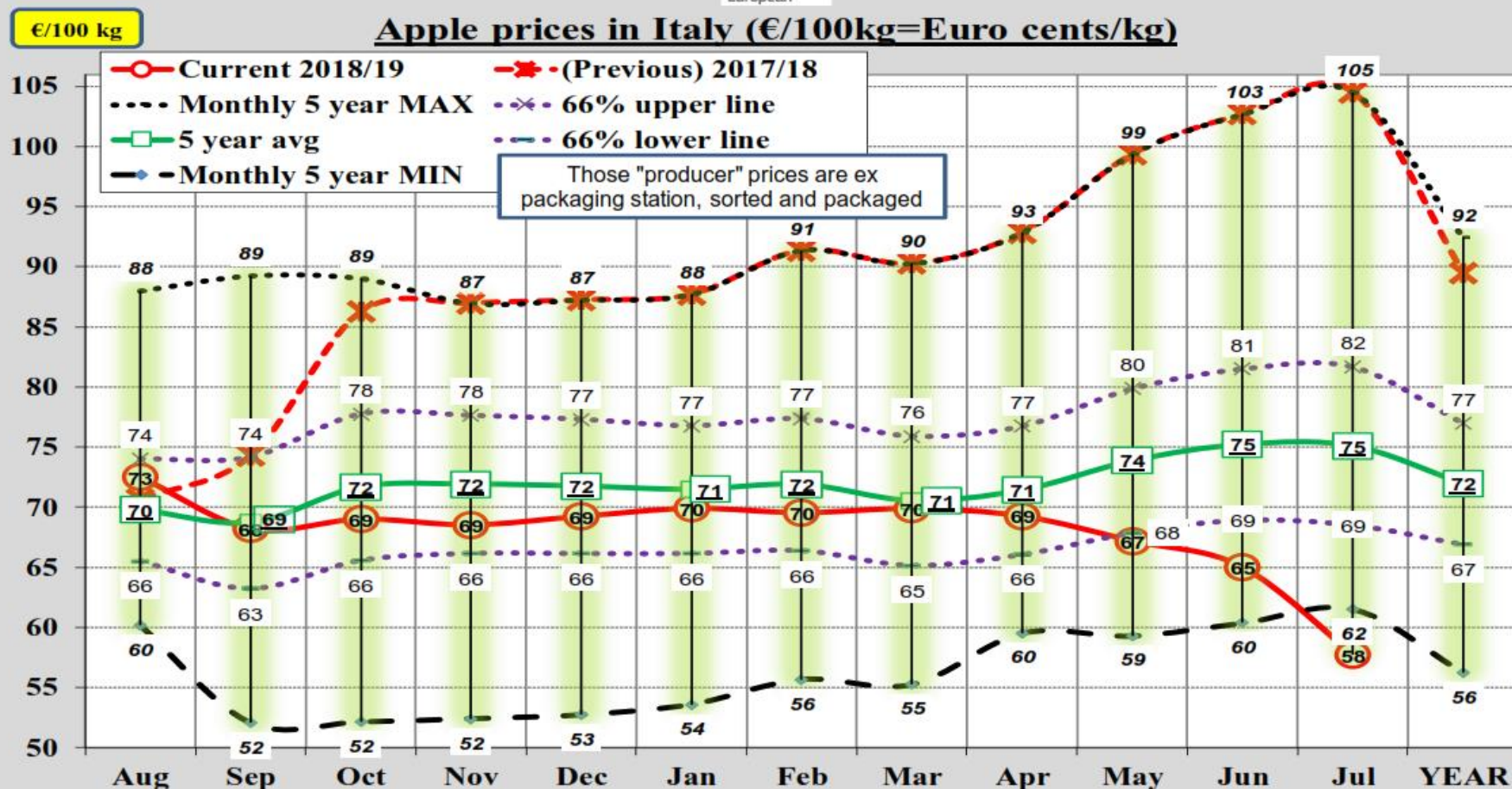


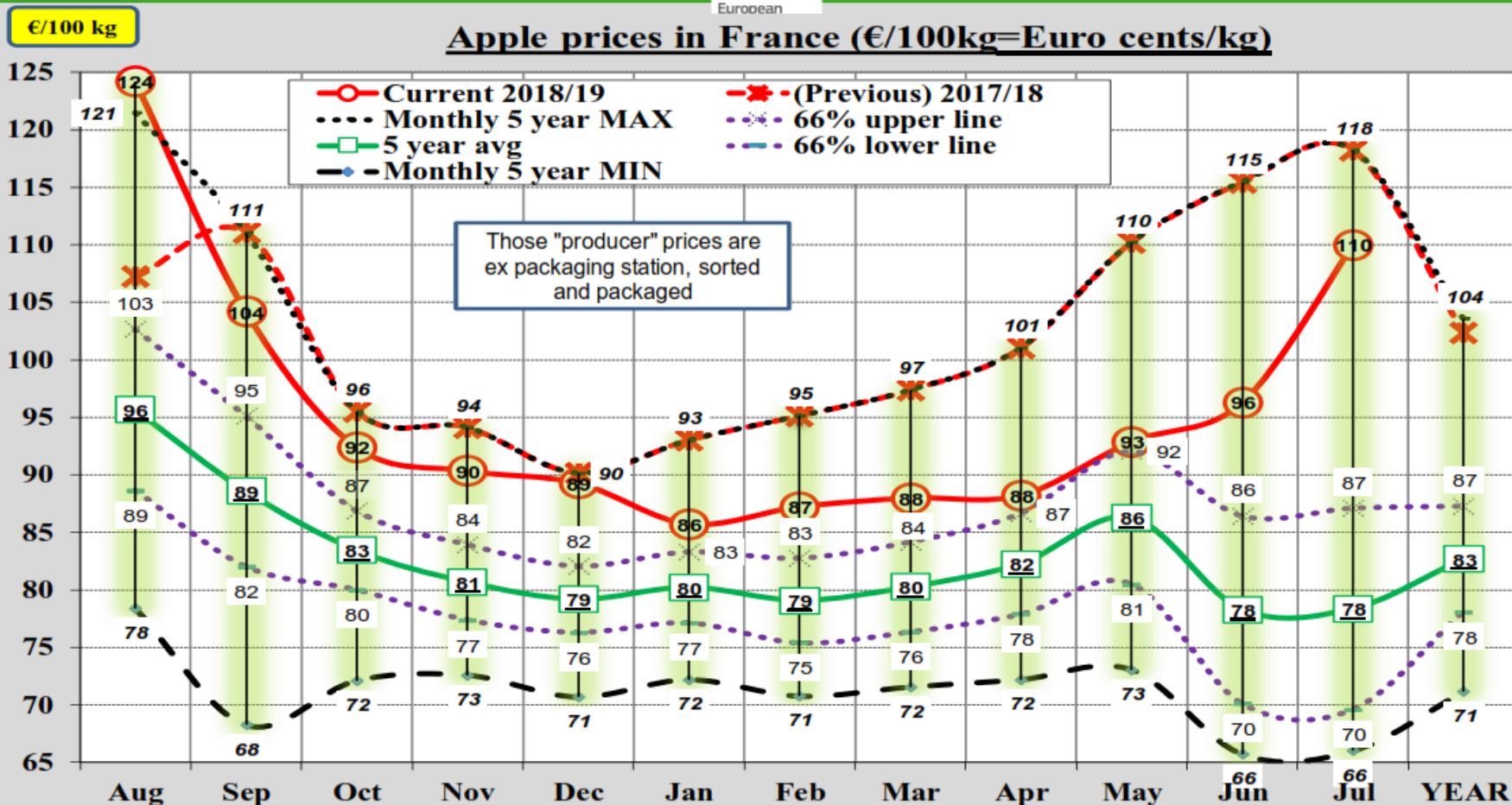


€/100 kg

Apple prices in Poland (€/100kg=Euro cents/kg)

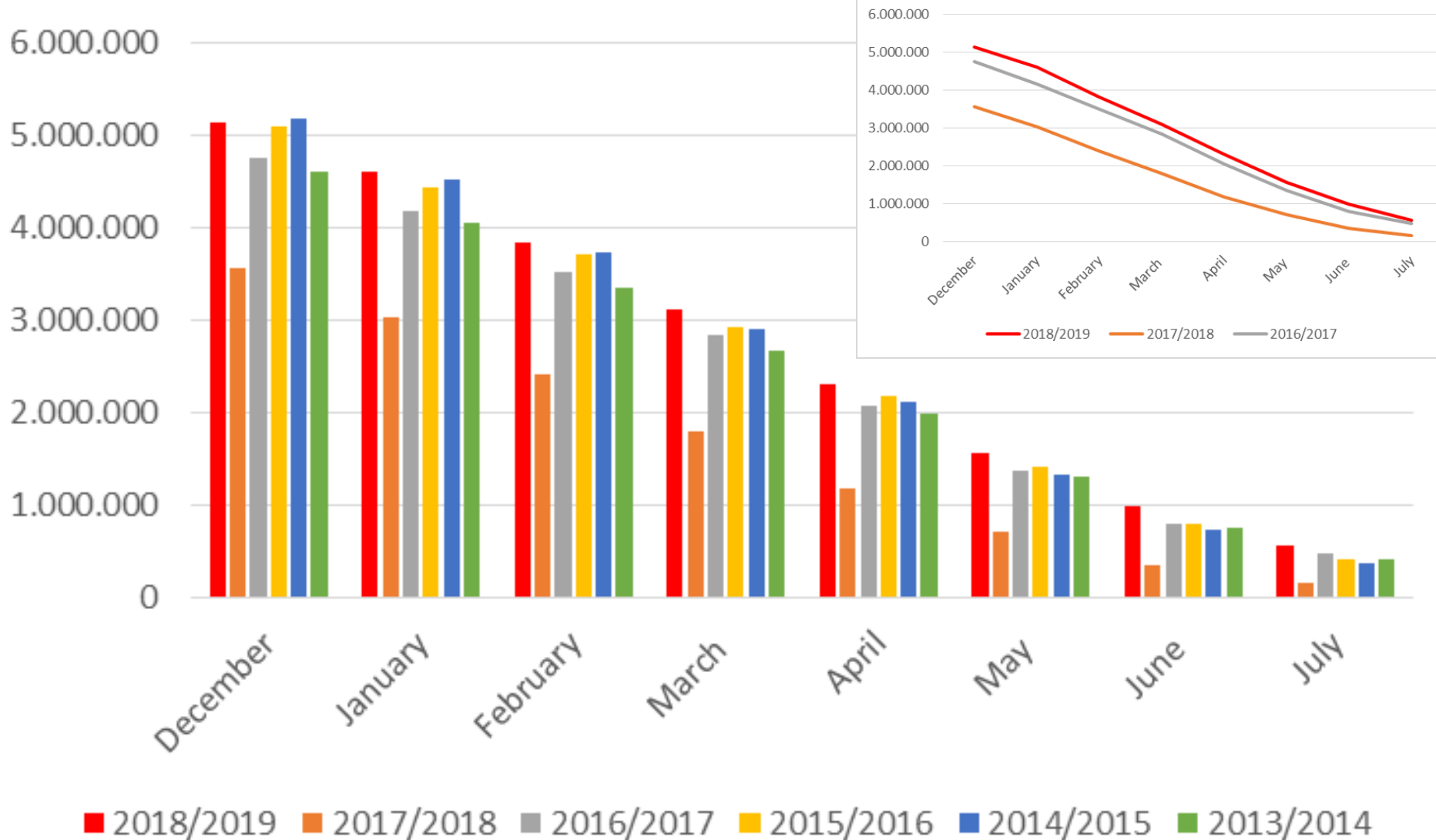






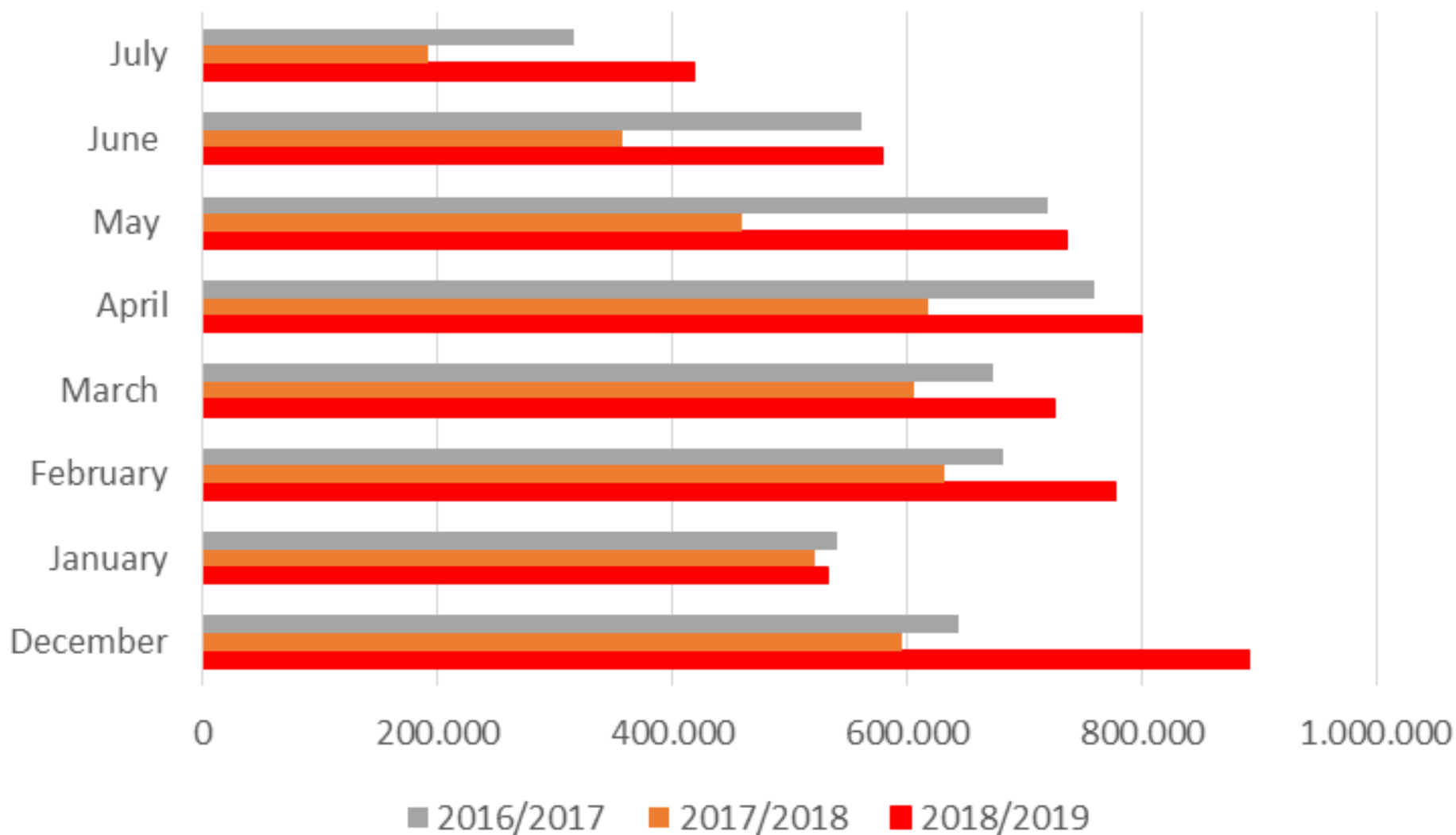
Stocks depletion

(Source: DATA WAPA)



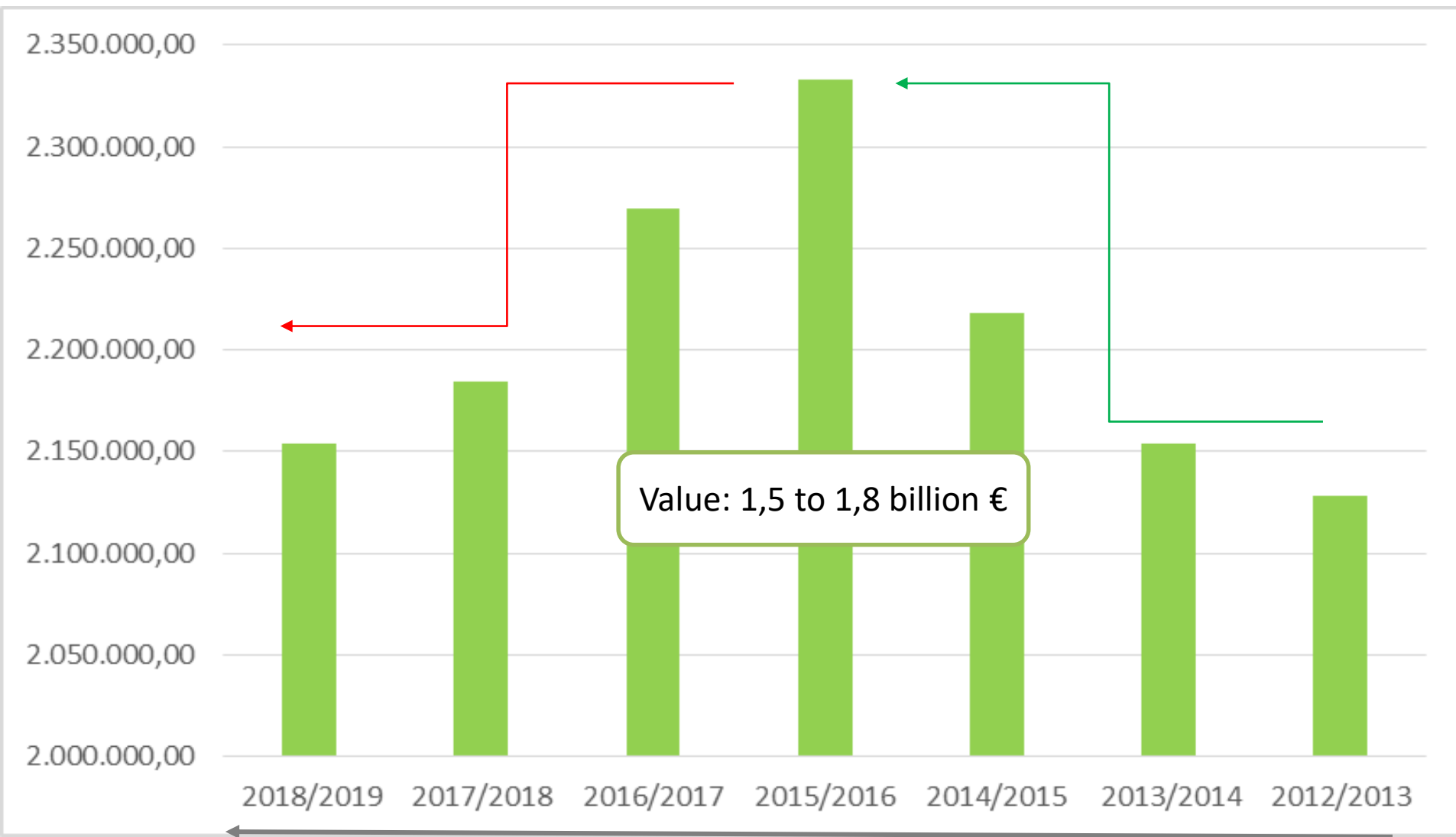
Stocks depletion

(Source: DATA WAPA)



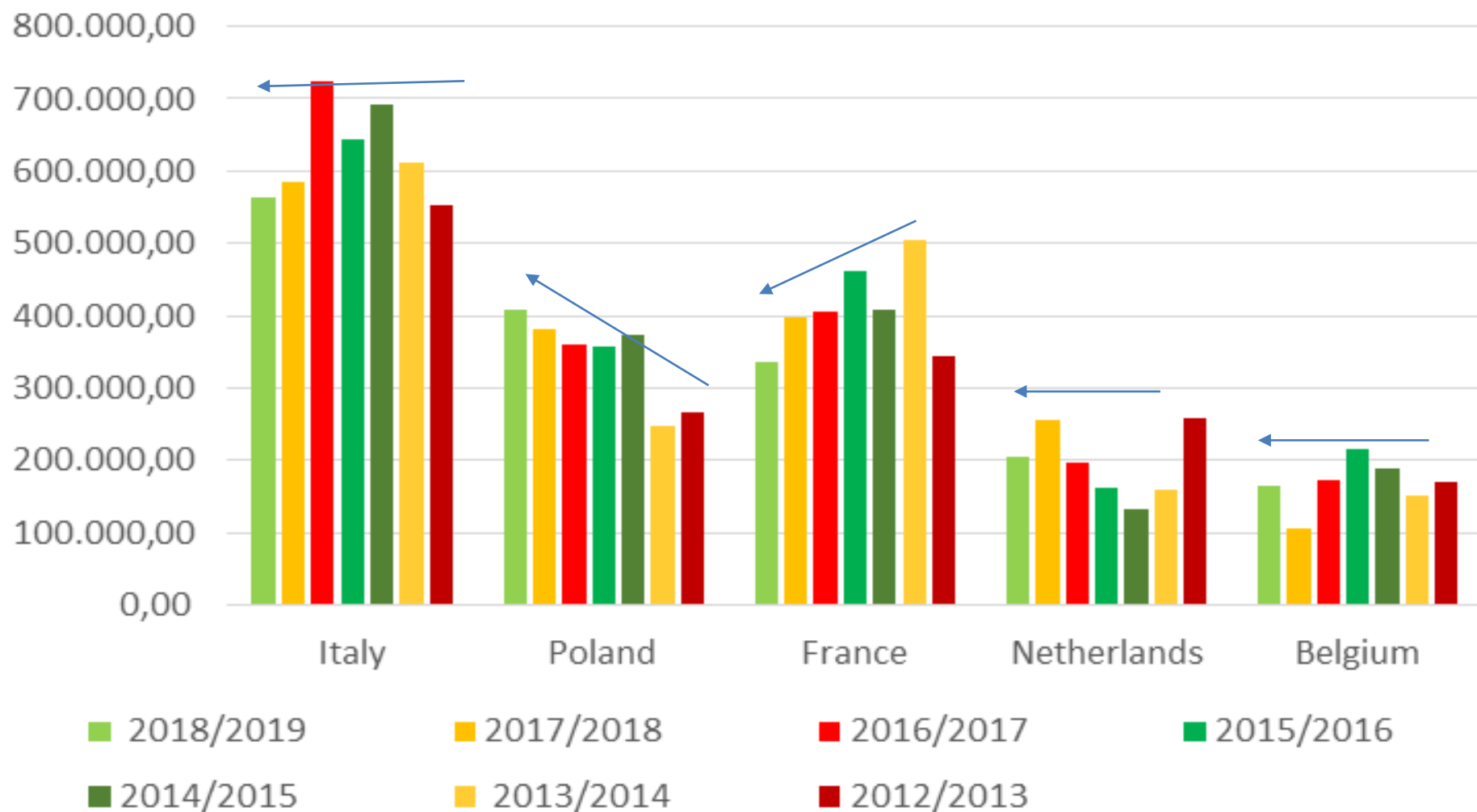
Intra EU apples trade (by season)

(Source: Freshfel Europe Qlickfresh & Eurostat)



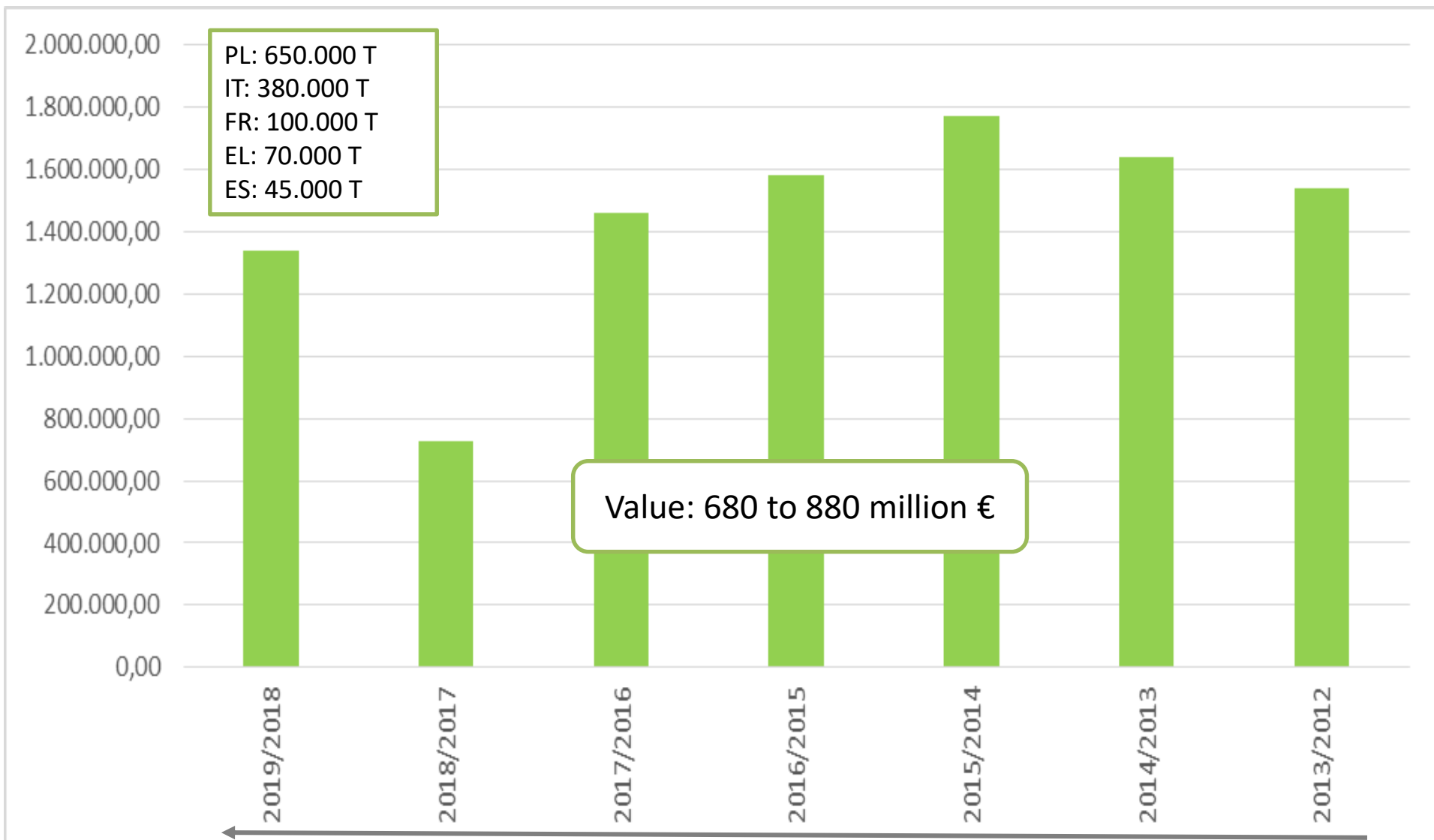
Intra EU apples trade (by season)

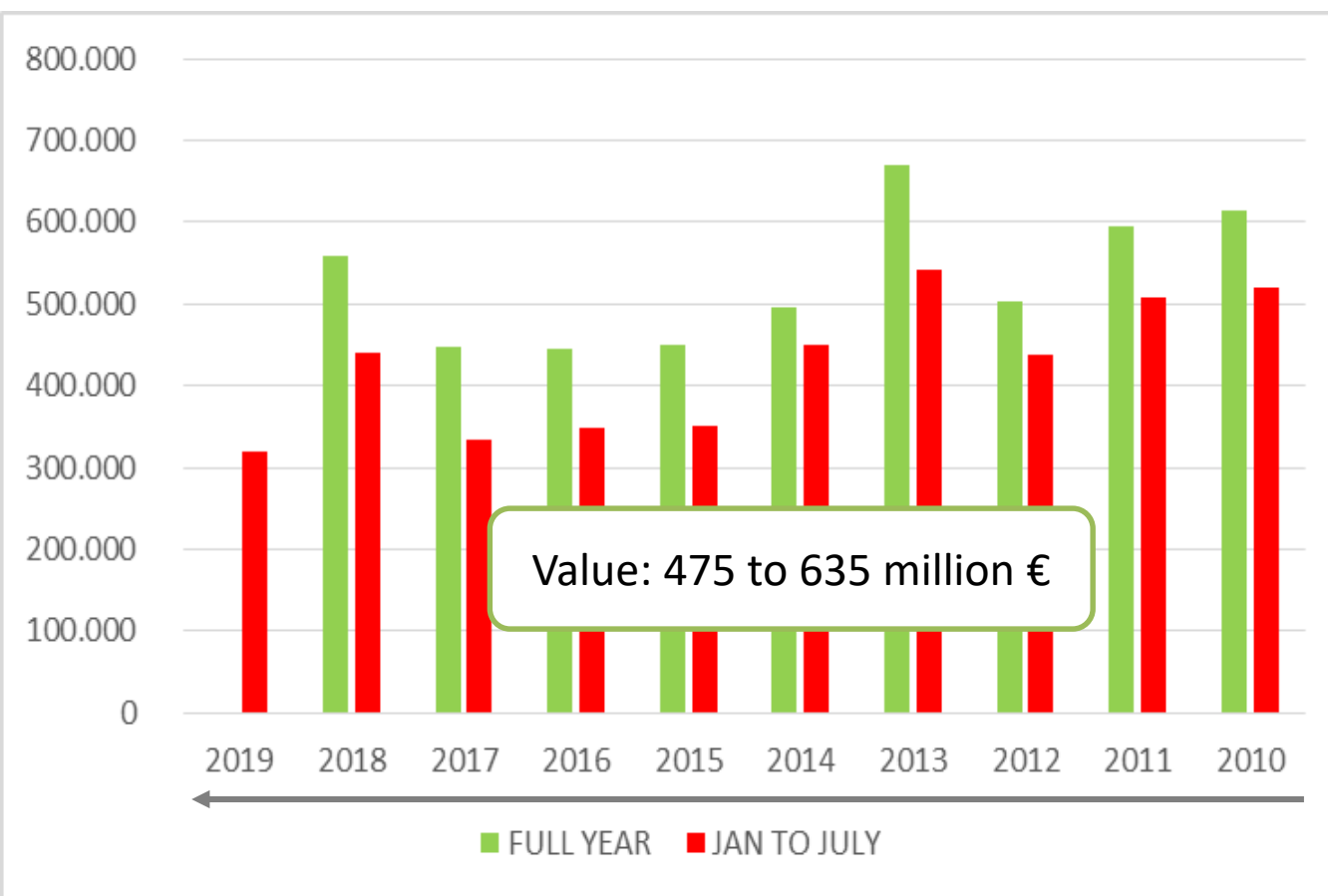
(Source: Freshfel Europe Qlickfresh & Eurostat)



EU export of apples (by season)

(Source: Freshfel Europe Qlickfresh & Eurostat)





	2019	2018	2017
Total Jan -July	318.531	440.672	335.024
Chile	101.740	159.168	105.231
New Zealand	90.155	120.035	104.134
South Africa	64.298	86.847	64.607
N. Macedonia	24.927	2.397	5.789
Argentina	14.393	23.069	16.281
Brazil	13.149	25.641	25.558
Serbia	1.912	4.569	2.481
Uruguay	1.326	3.008	5.487
United States	1.270	4.621	1.597
Ukraine	335	3.112	253
China	219	2.476	762
Other	4.807	5.730	2.845

90% = SH
IMPORTS

European apples supply balance

(Source: Prognosfruit)



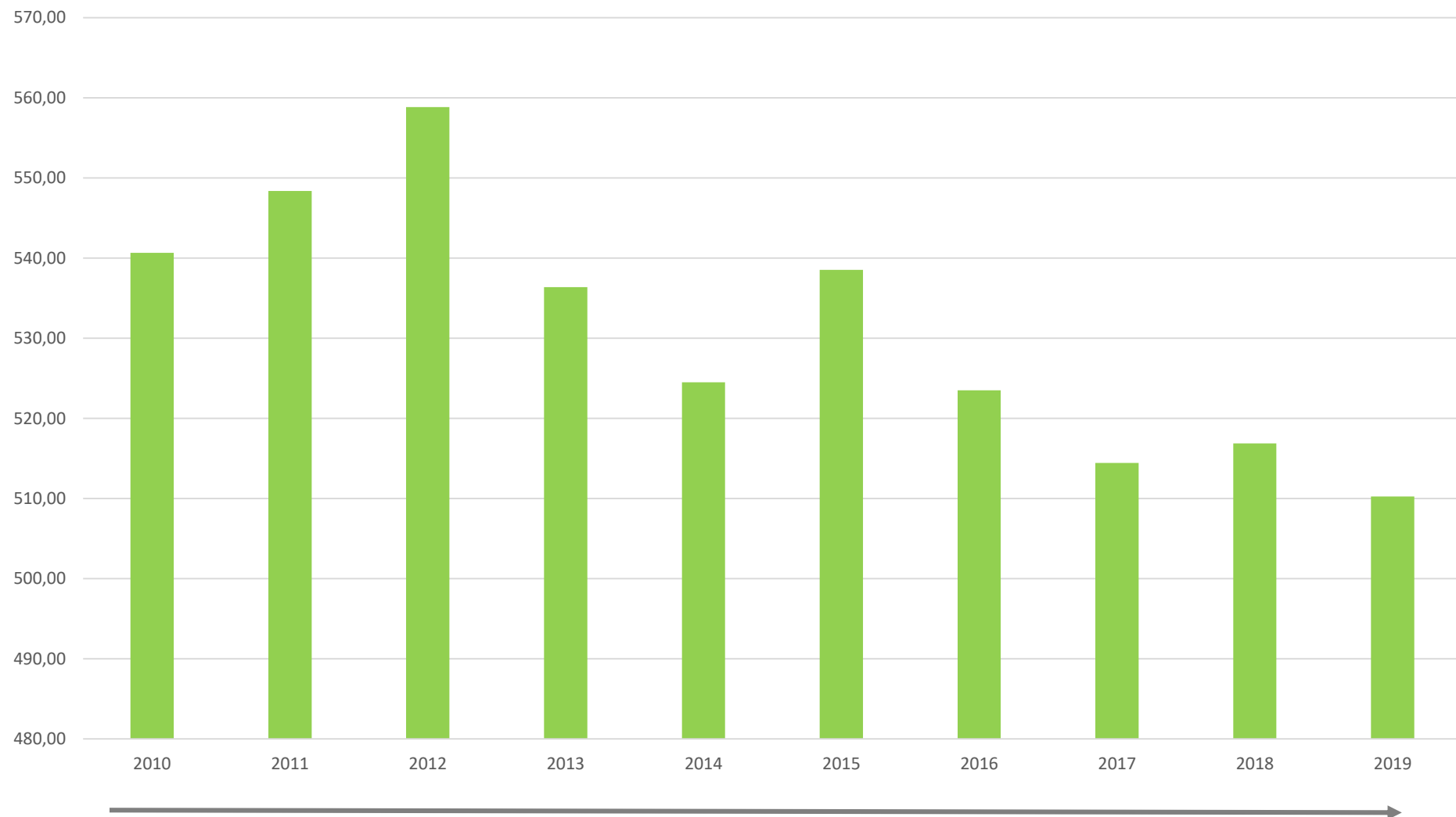
Production	2018/2019	2017/2018	2016/2017	2015/2016	2014/2015	Unit
Production	13.275.000	9.251.000	11.834.000	12.326.000	12.541.000	T
Intra EU	2.154.218	2.184.371	2.269.287	2.333.102	2.218.020	T
Export	1.340.444	727.551	1.459.639	1.578.104	1.768.154	T
Processing	4.725.480	2.652.000	3.536.000	3.820.000	3.431.000	T
Domestic fresh	5.054.858	3.687.078	4.569.074	4.594.794	5.123.826	T
Import	430.000	558.419	448.296	450.801	494.895	T
% fresh EU produce	0,64	0,71	0,70	0,69	0,73	%
% processing EU produce	0,36	0,29	0,30	0,31	0,27	%
Market size fresh	7.639.076	6.429.868	7.286.657	7.378.697	7.836.741	T
Population	513.000.000	512.000.000	511.000.000	509.000.000	508.000.000	CITIZENS
Fresh onsumption kg capita	14,89	12,56	14,26	14,50	15,43	KG



OUTLOOK SEASON 2019/2020

EU Apple orchard ('000 HA)

(Source: Eurostat)



EU Apple orchard ('000 HA)

(Source: Eurostat)



GEO/TIME	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Poland	170,40	183,50	194,70	162,40	163,10	180,40	164,76	162,53	166,15	165,00
Italy	54,47	54,07	54,13	53,01	52,00	52,16	56,16	57,26	57,32	55,06
Romania	56,37	52,72	55,37	60,28	56,13	55,88	55,53	55,60	54,33	54,13
France	53,98	52,80	51,79	50,68	50,17	49,65	49,65	50,31	50,65	50,00
Germany	31,76	31,76	31,74	31,74	31,74	31,74	31,74	33,98	33,98	33,90
Spain	31,82	31,51	30,79	30,79	30,73	30,72	30,87	30,55	29,92	29,92
Hungary	34,03	33,09	32,04	33,36	33,26	32,80	32,49	25,19	26,40	24,50
United Kingdom	15,40	16,00	16,00	20,00	16,00	16,00	17,00	16,60	16,20	16,00
Portugal	12,45	12,54	12,90	13,66	13,85	14,01	14,98	14,79	14,60	14,50
Lithuania	9,57	10,11	11,83	11,67	11,27	10,68	9,70	9,82	10,13	9,80
Greece	13,52	13,48	12,47	12,95	12,26	11,85	10,04	9,60	9,60	9,78
Austria	6,05	6,05	6,05	6,97	6,76	6,62	6,67	6,67	6,74	6,74
Czechia	9,03	9,30	9,37	8,98	8,96	8,31	7,49	6,60	6,50	6,50
Netherlands	8,68	8,27	7,95	7,91	7,85	7,60	7,30	7,00	6,60	6,47
Belgium	7,73	7,75	7,14	7,06	7,07	6,87	6,49	6,16	5,99	5,80
Croatia	6,60	6,55	5,98	5,38	5,94	5,76	5,89	4,84	4,73	4,70
Bulgaria	5,20	4,90	4,62	4,81	3,95	4,77	4,11	3,97	3,98	4,00
Latvia	2,60	2,80	2,50	2,80	2,70	2,40	2,40	3,30	3,20	3,70
Slovenia	2,77	2,73	2,70	2,64	2,55	2,47	2,42	2,36	2,33	2,20
Slovakia	2,12	2,29	2,91	3,65	2,56	2,38	2,31	2,18	2,14	2,10
Sweden	1,42	1,31	1,41	1,26	1,29	1,33	1,54	1,40	1,41	1,45
Denmark	1,61	1,56	1,43	1,38	1,38	1,39	1,35	1,28	1,42	1,40
Ireland	0,62	0,62	0,62	0,62	0,64	0,64	0,70	0,70	0,70	0,70
Finland	0,65	0,67	0,59	0,59	0,60	0,63	0,62	0,63	0,63	0,67
Estonia	0,80	0,90	0,70	0,90	0,90	0,60	0,51	0,48	0,60	0,60
Cyprus	0,75	0,84	0,86	0,63	0,61	0,61	0,53	0,37	0,37	0,37
Luxembourg	0,24	0,24	0,24	0,24	0,24	0,26	0,26	0,27	0,27	0,27
Malta	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total	540,64	548,36	558,83	536,36	524,51	538,53	523,51	514,44	516,89	510,26

- ✓ Year of alternance after last year bumper crop
- ✓ Expected further variations of the forecast:
 - ✓ Climatic havocs not always homegenous damages impact on parcels even in same region => not facilitating forecast
 - ✓ Some quality aspects still difficult to estimate :size, damages,..
- ✓ Abnormal temperature fluctuations: Relatively mild winter, with advance vegetation in many places (lost afterwards), followed by cold temperature episodes in late April and early May => several cold waves at green buds and then at flowering (PL,CZ, DK,LV,..). Some russetting due to spring frosts
- ✓ Many production area with long humid periods leading to scab (HR, North DE, EL, HU, RO,..) and damages on flowering time. Heavy rains sequences as well.
- ✓ Humidity constrasting with other countries experiencing drought or latently low water reserve and poor rain supply => If no irrigation, drought and lack of rain to affect size: could be up to 2-4 mm less in certain regions (DE, FR, IT,...)
- ✓ More pressure of pests (Aphids, Asiatic bugs,..)
- ✓ Prolonged heat wave in June and July with sunburn impact
- ✓ Hails in north DE, some FR regions, EL , LV, HU (+ heavy storms end June) but production often well protected
- ✓ Colouring: often too early to assess

Late frost in East of Europe

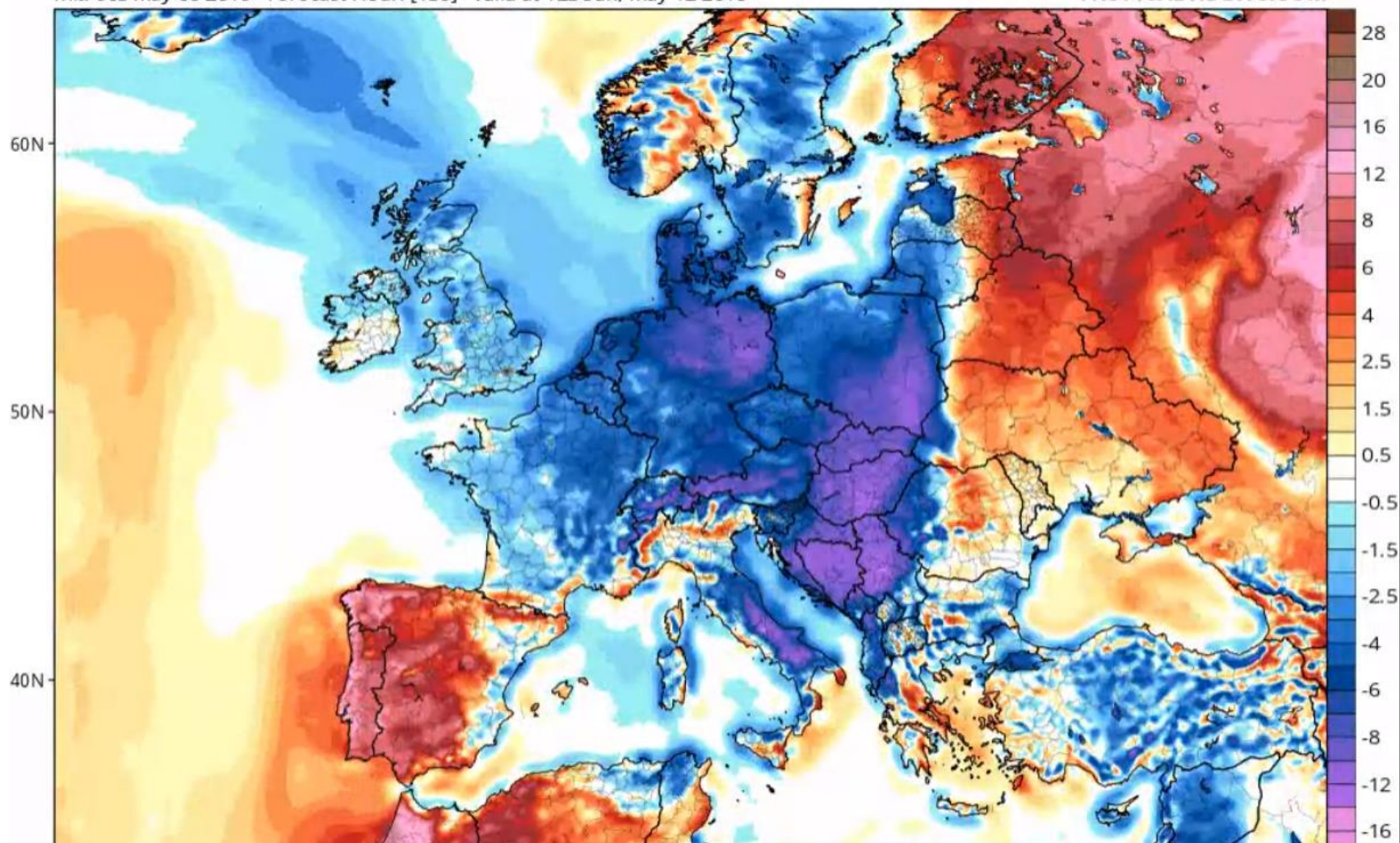
(Source: tropicaltidbits)



GFS 2-meter Temperature Anomaly ($^{\circ}\text{C}$) (based on CFSR 1981-2010 Climatology)

Init: 00z May 06 2019 Forecast Hour: [156] valid at 12z Sun, May 12 2019

TROPICALTIDBITS.COM



Heath waves and rainfall

(Source JRC European Commission)



AREAS OF CONCERN - EXTREME WEATHER EVENTS

Based on weather data from 1 June 2019 until 24 July 2019



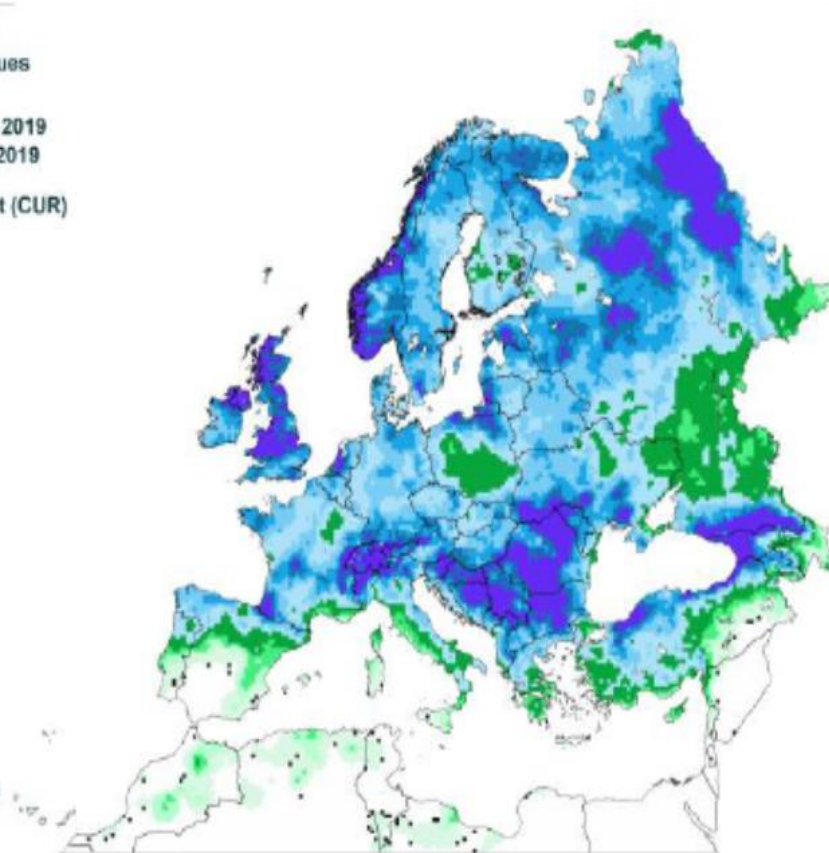
RAINFALL

Cumulated values

from : 01 June 2019

to : 15 July 2019

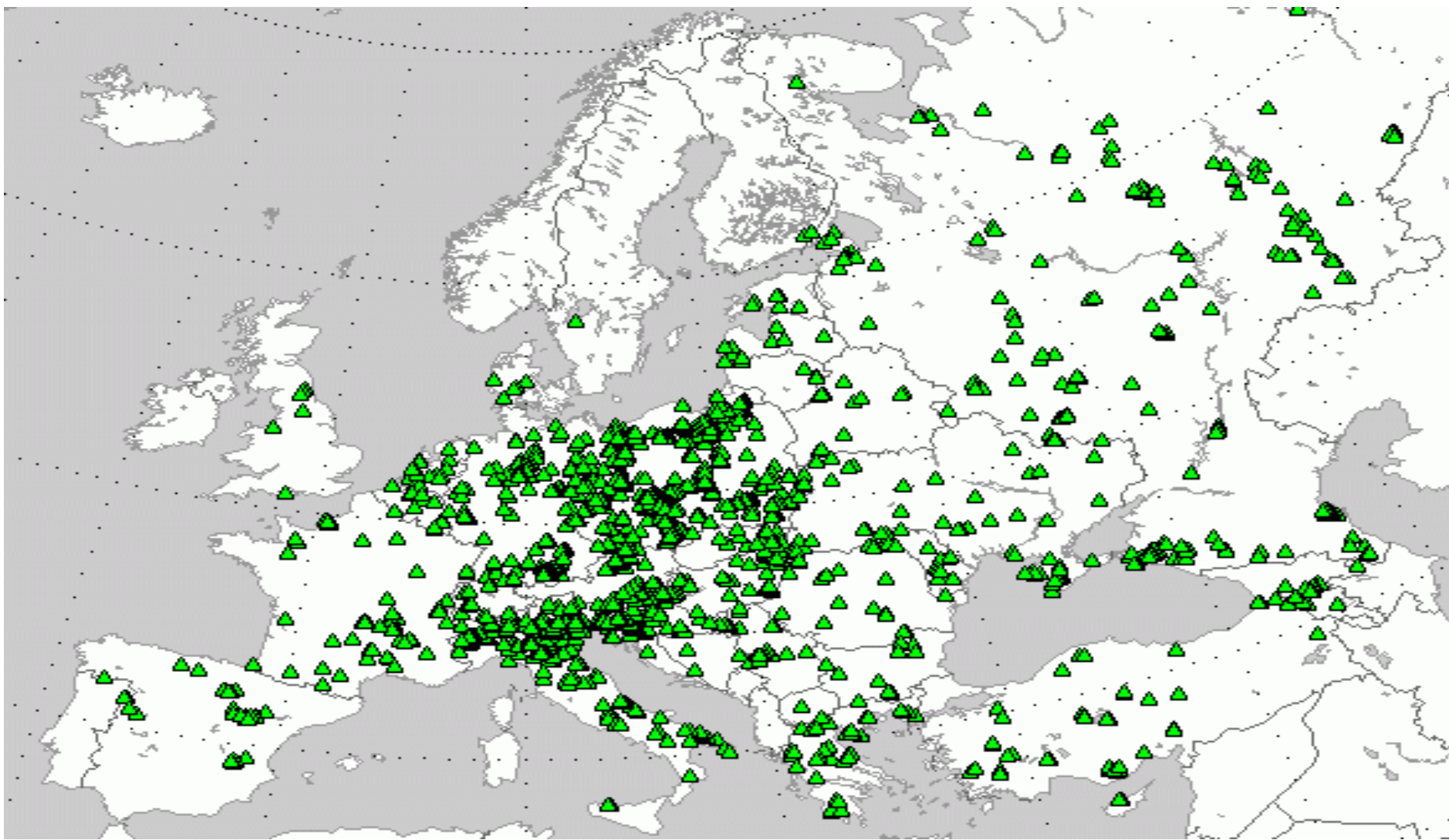
Year of interest (CUR)



© European Union 2019
Source: Joint Research Centre (JRC MARS/CAST)
Processed by: Alore consortium

Large hails incidents June -July

(Source: European Severe Damage database)



Timing and size to previous year (Source Prognosfruit)



TIMING	EARLY 2 WEEKS	EARLY ONE WEEK	AVERAGE	LATE ONE WEEK	LATE 2 WEEKS
AT					
BE					
HR					
DE					
FR					
EL					
IT					
LV					
LT					
PL					
PT					
SLO					
NL					

SIZING	SMALLER	NORMAL	LARGER
AT			
BE			
HR			
CZ			
EL			
DE			
HU			
IT			
LV			
LT			
PL			
SLO			

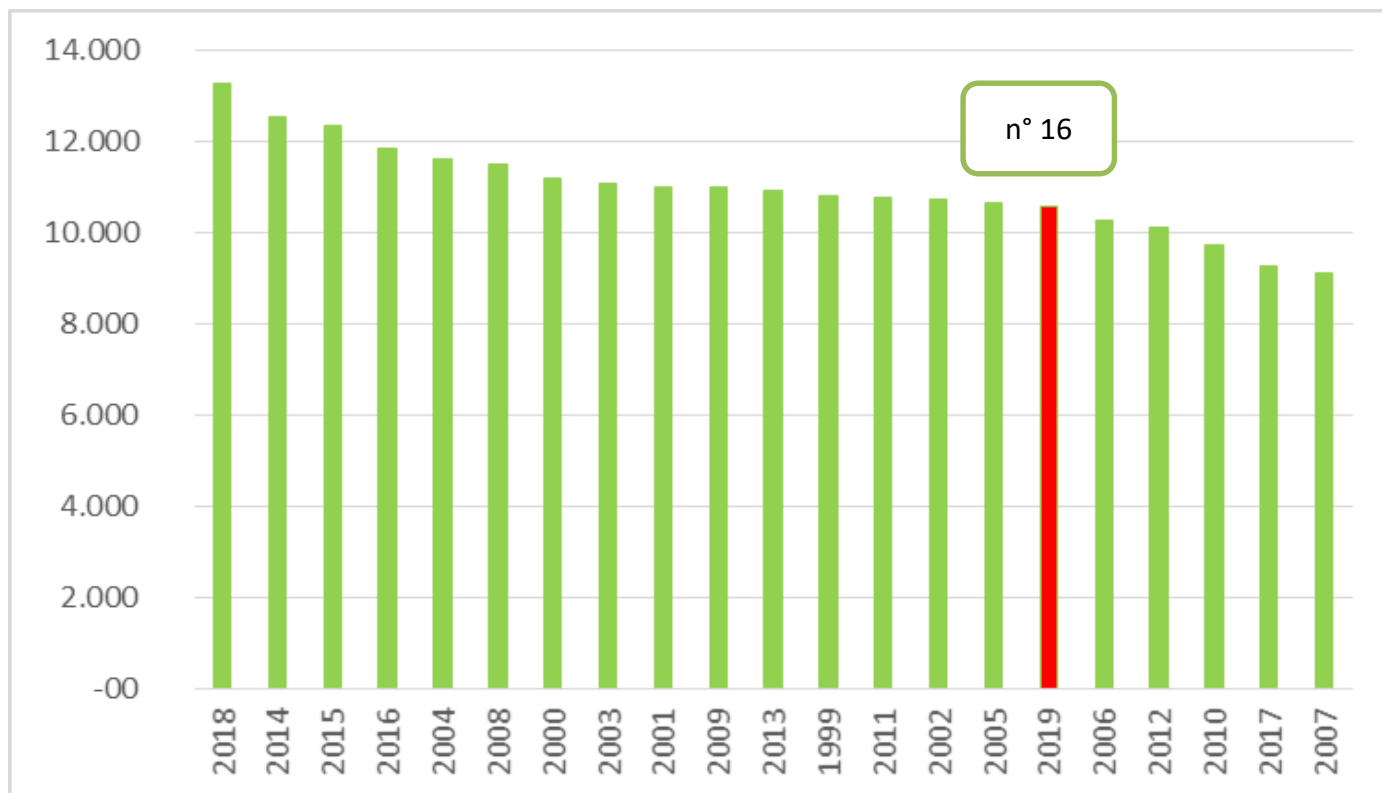


10.555.796 T

Decade Ranking (in '000 T)

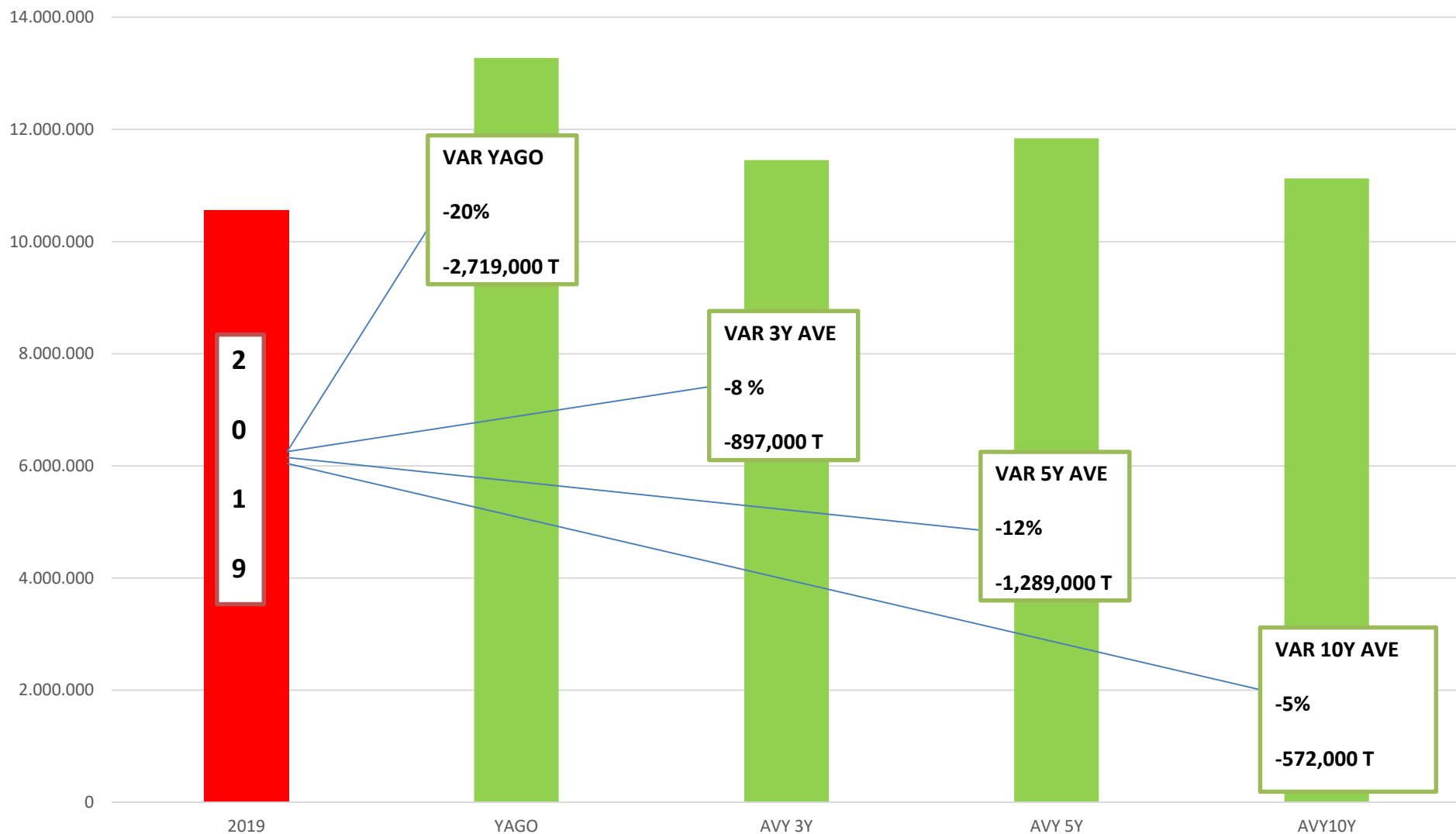
1	2018	13.275
2	2014	12.541
3	2015	12.326
4	2016	11.834
5	2013	10.929
6	2011	10.746
7	2019	10.556
8	2012	10.095
9	2010	9.740
10	2017	9.251

European Prognosfruit apples crop - 20 years perspective (in '000T)



Apples crop 2019 in perspective

(Source: Prognosfruit)



x 1000 tons

MAIN EXTREME TRENDS (10Y)

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	F2019	(1)	(2)
Austria	169	198	157	155	188	177	40	87	194	144	-22	48
Belgium	285	305	220	220	310	285	234	38	201	229	-1	24
Croatia	89	83	59	98	62	101	35	66	88	60	-30	-4
Czech Rep	103	79	118					102	145	113	-22	-12
Denmark	21	20	18					19	24	15	-38	-33
France	1,579	1,701	1,169					1,424	1,477	1,652	12	12
Germany	835	953	972					597	1,093	912	-17	0
Greece	254	305	242					231	301	275	-9	4
Hungary	488	301	750	363	820	522	486	530	782	452	-42	-25
Italy	2,179	2,293	1,938					1,704	2,264	2,195	-3	6
Latvia	12	8	9					8	14	11	-21	3
Lithuania	46	49	39					48	62	22	-65	-59
Netherlands	334	418	281					228	267	285	7	5
Poland	1,850	2,500	2,900					1,870	4,810	2,710	-44	-31
Portugal	251	265	221					314	267	307	15	9
Romania	423	412	351					230	425	319	-25	-3
Slovakia	32	33	36					15	44	36	-18	42
Slovenia	66	73	45					6	72	47	-35	57
Spain	486	507	391	464	505	482	495	480	476	542	14	12
Sweden	20	17	14	17	16	21	20	18	32	20	-38	-14
UK	214	226	162	204	206	243	239	207	219	210	-4	-5
Total:	9,740	10,746	10,095	10,929	12,541	12,326	11,834	9,251	13,275	10,556	-20	-8

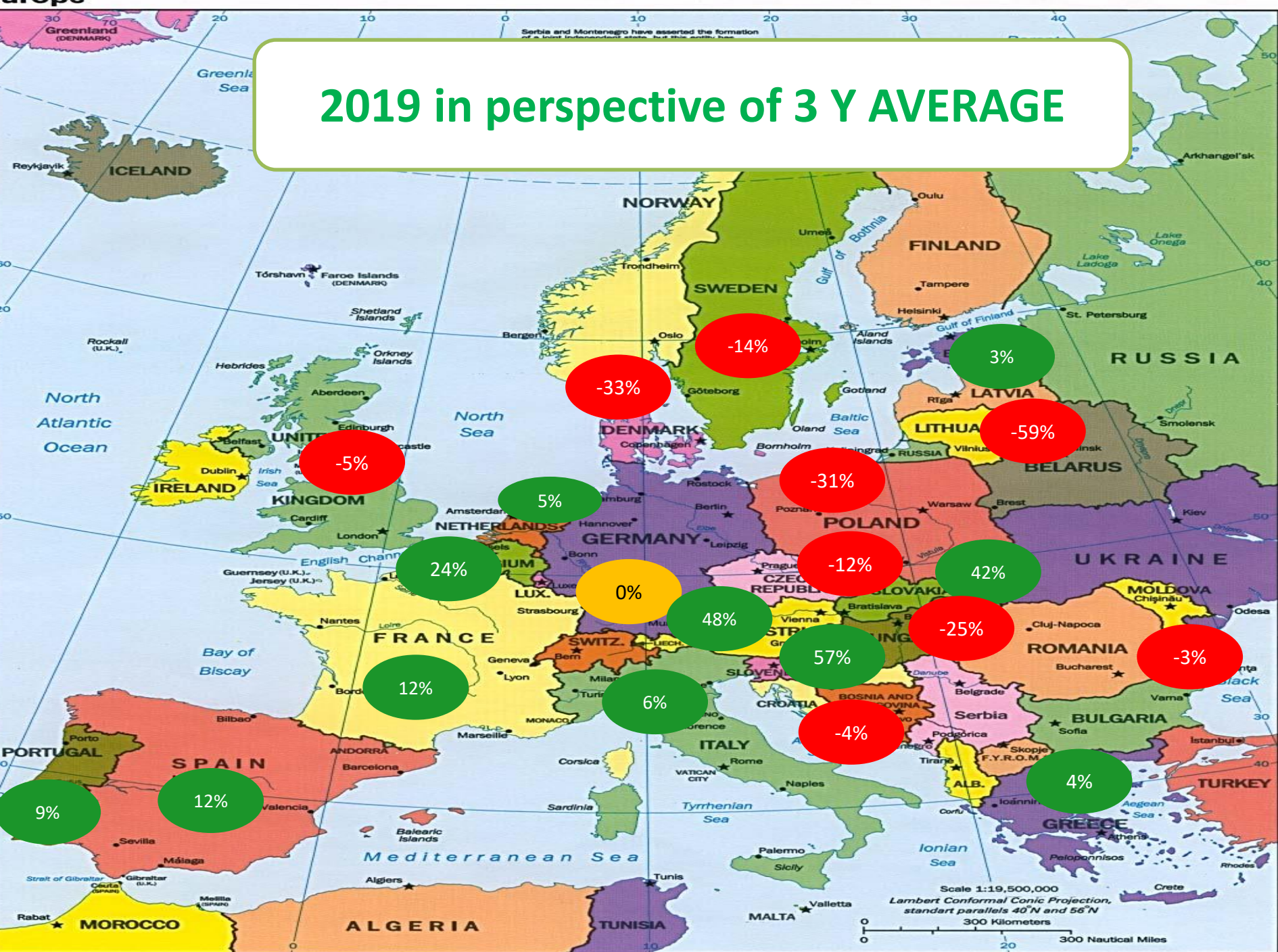
Crop trends (high)

- Spain : largest ever
- Portugal second largest
- France : third large

Crop trends (low)

- Poland : third lower
- Romania :second lowest
- Hungary :second lowest
- Lithuania: lowest
- Denmark : lowest

2019 in perspective of 3 Y AVERAGE



Apple production in other Member States (based on EUROSTAT data)

	x 1000 tons									
Country	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bulgaria	35,46	43,20	40,40	30,94	55,01	54,50	58,42	44,76	44,93	50,30
Cyprus	7,27	6,95	7,12	6,84	5,31	4,85	4,88	4,20	3,79	3,77
Estonia	1,80	0,80	1,20	1,00	2,40	1,20	1,60	2,77	0,96	1,64
Finland	4,28	4,26	5,25	4,81	4,81	5,34	6,03	6,40	6,76	7,20
Ireland	13,08	21,06	20,44	12,10	15,22	19,62	18,79	21,81	21,37	20,66
Luxembourg	2,34	2,65	2,13	1,82	1,93	2,62	2,42	1,51	0,98	2,08

+

10.555.796 T

85.000 T (2018)
-20% for 2019 = 68.000 T

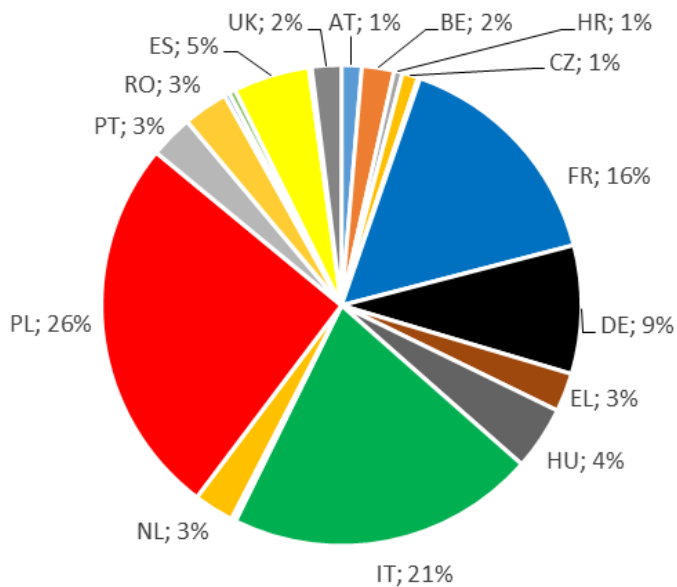
EU-28: 10.623.796 T

Main variations year on year & country share

(Source Prognosfruit)

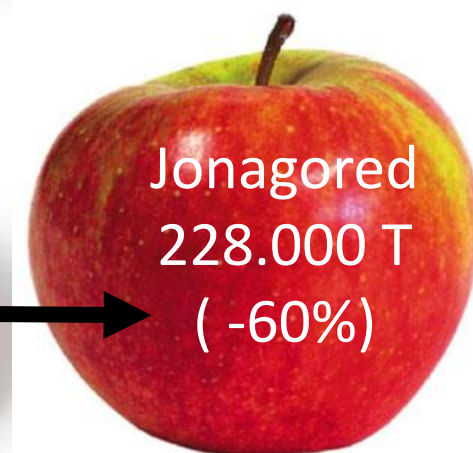
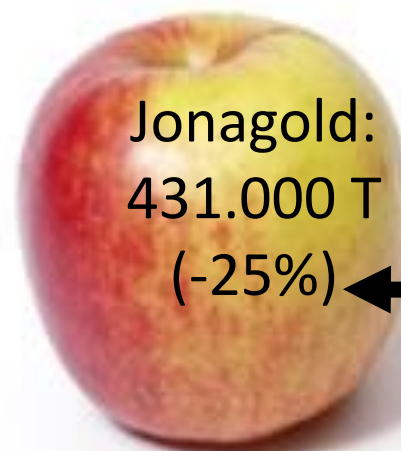
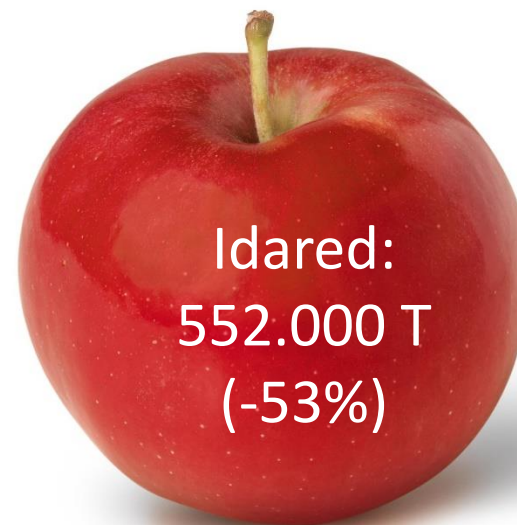
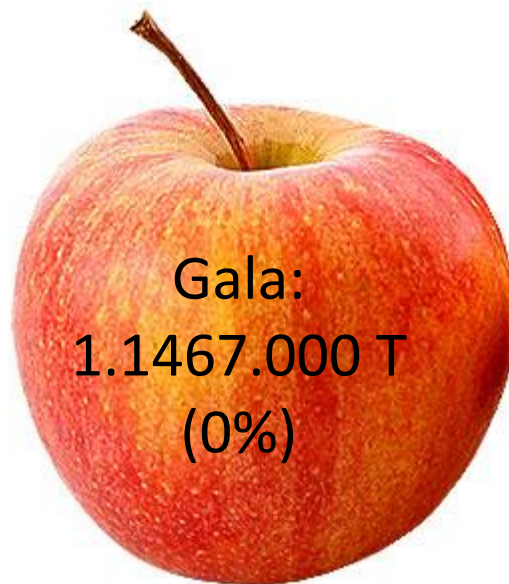


Share of EU apples production



MS	2018	2019
AT	1%	1%
BE	2%	2%
HR	1%	1%
CZ	1%	1%
DK	0%	0%
FR	11%	16%
DE	8%	9%
EL	2%	3%
HU	6%	4%
IT	17%	21%
LV	0%	0%
LT	0%	0%
NL	2%	3%
PL	36%	26%
PT	2%	3%
RO	3%	3%
SK	0%	0%
SLO	1%	0%
ES	4%	5%
SW	0%	0%
UK	2%	2%

x 1000 tons												
Variety	2010	2011	2012	2013	2014	2015	2016	2017	2018	F2019	(1)	(2)
Annurca	34	35	35	35	40	35	35	35	40	40	0	9
Boskoop	60	73	58	58	85	77	71	34	66	59	-12	3
Braeburn	289	324	264	302	323	327	318	220	312	294	-6	4
Bramley	95	91	59	70	83	84	85	75	72	55	-24	-29
Cortland	50	70	40	25	25	26						
Cox Orange										16	-30	-34
Cripps Pink										299	9	13
Elstar										355	-1	5
Fuji										339	2	12
Gala										1,467	0	9
Gloster										146	-23	-21
Golden Delicious										2,327	-3	4
Granny Smith										377	-4	-1
Idared										552	-53	-40
Jonagold										431	-25	-10
Jonagored										228	-60	-52
Jonathan										95	-42	-28
Lobo												
Morgendurf/imper										57	-2	6
Pinova										151	-3	31
Red Delicious										656	-11	2
Red Jonaprince										204	-45	-5
Reinette Grise du										129	-9	16
Shampion										466	-18	-7
Spartan	6	6	6	6	6	6	4	3	5	4	-22	-3
Stayman	18	17	12	18	14	14	14	8	7	6	-23	-41
Other new varietie	134	152	100	152	165	207	213	209	344	377	10	48
Other	1,495	1,541	1,377	1,358	1,808	1,713	1,735	1,192	2,127	1,229	-42	-27
Ligol			250	260	290	303	330	250	350	200	-43	-35
Total:	9,740	10,746	10,095	10,929	12,541	12,326	11,834	9,251	13,275	10,556	-20	-8



Trends club varieties

(Source Prognosfruit)



Club varieties	2016	2017	2018	2019	2020-2024
Kanzi	65.000	60.000	65.000	70.000	100.000
Greenstar	7.000	4.000	7.000	8.000	8.000
Junami	20.000	20.000	16.500	20.000	25.000
Jazz	31.850	35.300	37.220	42.501	41.000
Envy	1.620	3.250	6.487	13.260	11.000
Pink Lady	172.000	178.000	171.000	205.000	210.000
Joya	4.300	6.700	6.250	9.000	10.000
Honey Crunch	15.000	15.000	14.000	18.000	25.000
Juliet	8.500	9.500	11.500	12.000	14.000
Ambrosia	16.000	17.000	21.000	22.000	40.000
Evelina	13.000	15.000	13.000	15.000	15.000
Total apples	354.270	363.750	368.957	434.761	499.000
Sweet Sensation	6.100	4.300	5.000	9.000	12.000

Some assets:

- Clearing old varieties
- Taste
- New branding
- New resistance to pests & disease
- Meet societal expectations
- Stimulate consumption



Organic apples 2019 v 2018

(Source: Prognosfruit)



479.500 T down from 661.000 t corresponding to 5% of the crop

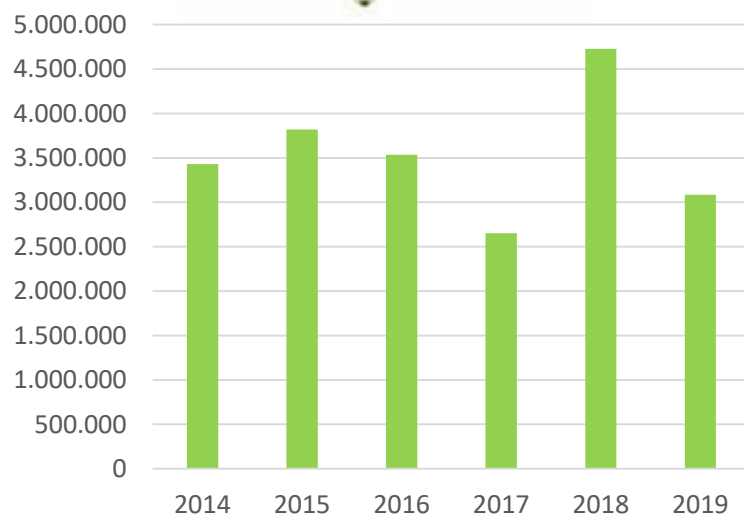
	2018	% ORGANIC	VOL IN T	2019	% ORGANIC	VOL IN T
AT	184.000	0,15	27.600	144.000	0,170	24.480
BE	231.000	0,025	5.775	229.000	0,040	9.160
HR	86.000	0,035	3.010	60.000	0,030	1.800
CZ	145.000	0,2	29.000	113.000	0,030	3.390
FR	1.477.000	0,06	88.620	1.652.000	0,070	115.640
DE	1.093.000	0,09	98.370	912.000	0,090	82.080
EL	301.000	0,02	6.020	275.000	0,022	6.050
HU	782.000	0,02	15.640	452.000	0,030	13.560
IT	2.264.000	0,06	135.840	2.195.000	0,060	131.700
LV	14.000	0,25	3.500	11.000	0,250	2.750
LT	62.000	0,02	1.240	22.000	0,020	440
NL	267.000	0,06	16.020	285.000	0,060	17.100
PL	4.810.000	0,01	48.100	2.710.000	0,010	27.100
PT	267.000	0,5	133.500	307.000	0,050	15.350
RO	425.000	0,1	42.500	319.000	0,080	25.520
SLO	72.000	0,09	6.480	47.000	0,070	3.290
TOTAL	12.480.000		661.215	9.733.000		479.410
TOTAL CROP	13.275.000		0,05	10.556.000		0,05
% CROP SURVEYED	94%			92%		



3.083.550 T

Volume for apples processing in selected countries

(covering > 91% EU crop - Data in '000T)



	2018	% PROCESSING	VOL	2019	PROCESSING	VOL
BE	231.000	0,43	99.330	229.000	0,300	68.700
HR	86.000	0,4	34.400	60.000	0,260	15.600
CZ	145.000	0,5	72.500	113.000	0,400	45.200
FR	1.477.000	0,2	295.400	1.652.000	0,180	297.360
DE	1.093.000	0,28	306.040	912.000	0,320	291.840
EL	301.000	0,2	60.200	275.000	0,200	55.000
HU	782.000	0,7	547.400	452.000	0,750	339.000
IT	2.264.000	0,14	316.960	2.195.000	0,130	285.350
LV	14.000	0,4	5.600	11.000	0,500	5.500
LT	62.000	0,28	17.360	22.000	0,350	7.700
PL	4.810.000	0,55	2.645.500	2.710.000	0,500	1.355.000
PT	267.000	0,5	133.500	307.000	0,500	153.500
RO	425.000	0,35	148.750	319.000	0,350	111.650
SLO	72.000	0,22	15.840	47.000	0,200	9.400
NL	267.000	0,1	26.700	285.000	0,150	42.750
	12.296.000		4.725.480	9.589.000		3.083.550
	13.275.000		0,38	10.556.000		0,32
	93%			91%		

Apples supply balance 2019

(Source: Prognosfruit)



	2014	2015	2016	2017	2018	2019
Production	12.541.000	12.326.000	11.834.000	9.251.000	13.275.000	10.556.000
Processing	3.431.000	3.820.000	3.536.000	2.652.000	4.725.480	3.082.500
Fresh	9.110.000	8.506.000	8.298.000	6.599.000	8.549.520	7.473.500
Ratio fresh	73%	69%	70%	71%	64%	71%
Ratio processing	27%	31%	30%	29%	36%	29%

Season 2019/2020

- Fresh supply: 7.473.500 T
- Export: 1.300.000 T ???
- Import: 450.000 T ???
- Total fresh: 6.623.500T ???
- Kg/capita : 12,91 kg???



Apples production 2019 : elsewhere

(Source: Prognosfruit)



Switzerland

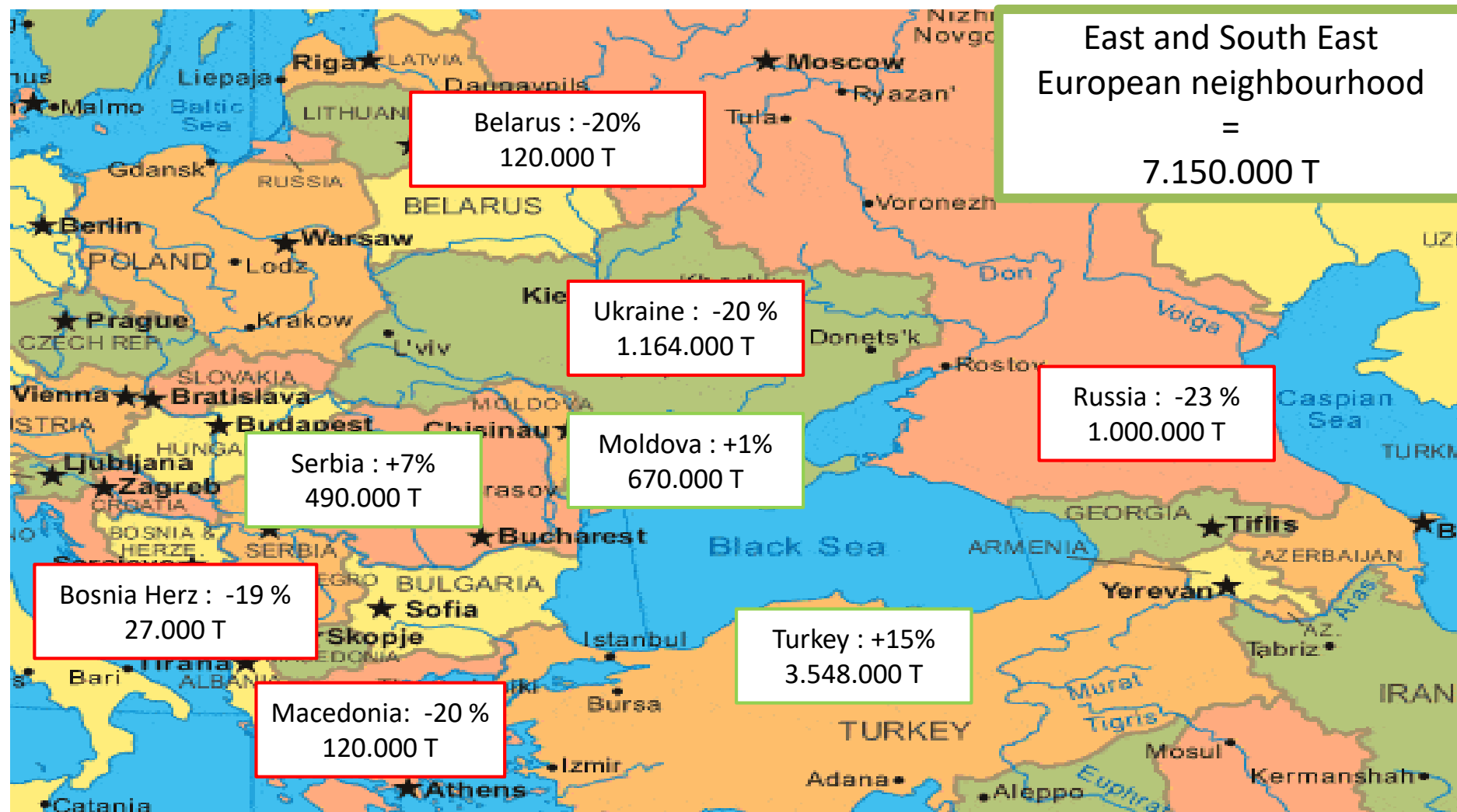
x 1000 tons

<i>Variety</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>F2019</i>	<i>(1)</i>	<i>(2)</i>
Boskoop	3	5	5	4	4	4	4	2	7	4	-33	2
Braeburn	10	12	12	13	15	15	13	7	16	12	-26	-2
Cox Orange	2	3	3	2	2	2	2	1	2	2	-30	-4
Cripps Pink							3	3	4	3	-23	-6
Elstar	2	3	2	2	2	2	2	1	3	2	-38	-7
Gala	28	37	33	31	33	35	33	29	43	34	-19	-1
Golden Delicious	29	30	26	24	26	23	22	16	22	18	-16	-9
Idared	7	6	5	5	4	4	3	2	2	2	-2	-4
Jonagold	8	11	10	7	8	9	9	2	10	8	-22	12
Pinova	2											
Other new varieties				8	8	6	7	6	10	7	-27	-2
Other	37	47	46	36	40	40	38	27	48	43	-10	15
Total Switzerland	127	155	141	132	143	140	136	96	167	137	-18	3

Apples production 2019 :

Eastern and Southern neighbourhood

(Source: Prognosfruit)





State							x 1000 tons	
	2014	2015	2016	2017	2018	F2019	(1)	(2)
New York	587	617	535	544	633	591	-7	3
Pennsylvania	224	235	200	222	221	219	-1	2
Virginia	88	89	82	100	93	84	-9	-8
Michigan	465	451	533	363	476	542	14	18
Washington	3.311	2.698	3.320	3.039	3.039	3.467	14	11
California	109	66	114	104	113	112	-1	2
Oregon	70	57	89	79	77	76	-1	-7
Other States	282	276	240	285	288	297	3	9
Total*	5.185	4.538	5.114	4.737	4.941	5.389	9	9

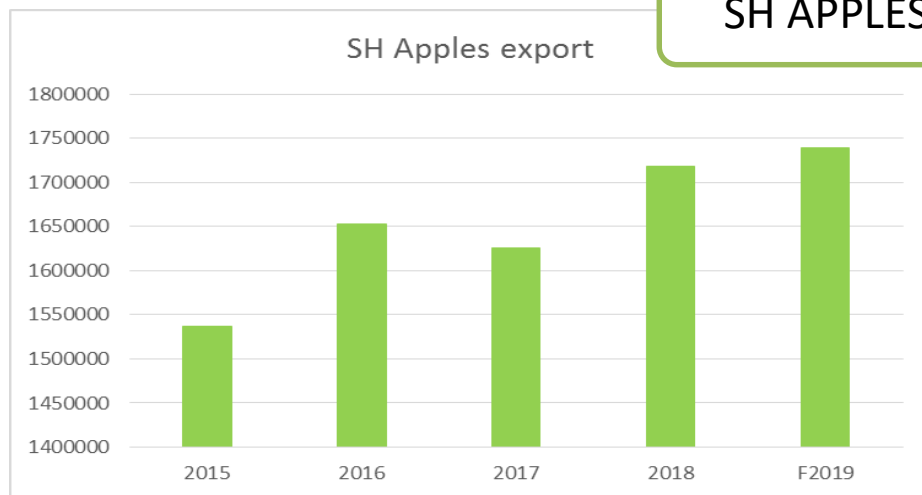
Mexico: 670.000 T (+2% to YAGO but -4% to 3 year average
 Canada : 357.000 T (-2% to YAGO but +8 to 3 year average)

Highest crop of the decade

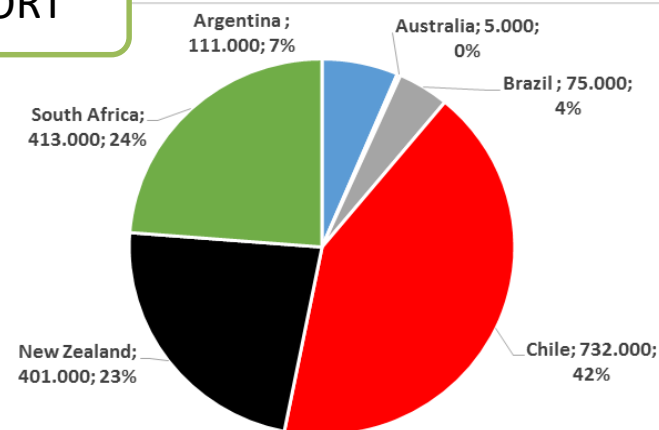
Apple Production by country

x 1000 tons

Country	2011	2012	2013	2014	2015	2016	2017	2018	F2019	(1)	(2)
Argentina	920	840	776	744	760	774	545	557	608	9	-3
Australia	260	293	289	275	309	301	306	292	318	9	6
Brazil	1.250	1.184	1.063	1.165	1.145	826	1.329	1.094	1016	-7	-6
Chile	1.784	1.806	1.746	1.670	1.708	1.635	1.675	1.761	1665	-5	-1
New Zealand	513	476	550	478	554	539	506	576	591	3	9
South Africa	768	813	907	794	924	902	940	884	928	5	2
Total	5.495	5.412	5.331	5.126	5.400	4.977	5.300	5.165	5.126	-1	0



SH APPLES EXPORT





www.wapa-association.org
www.prognosfruit.eu