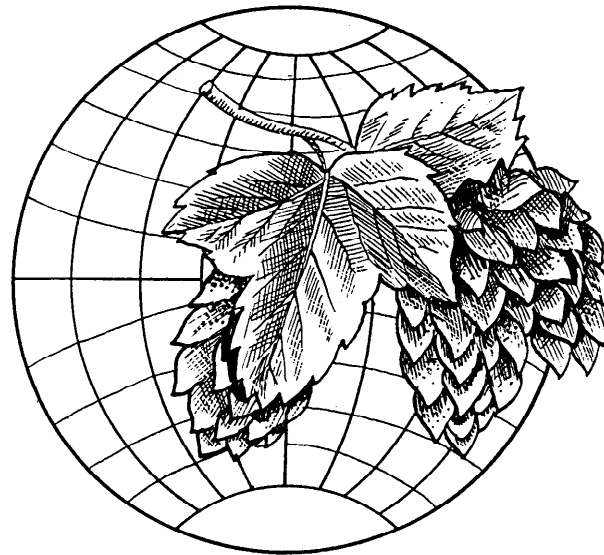


INTERNATIONAL HOP GROWERS' CONVENTION



ECONOMIC COMMISSION - SUMMARY REPORTS

LEÓN, SPAIN
JULY, 2018



International Hop Growers' Convention

IHGC - Economic Commission Summary Reports

León, Spain - July, 31, 2018

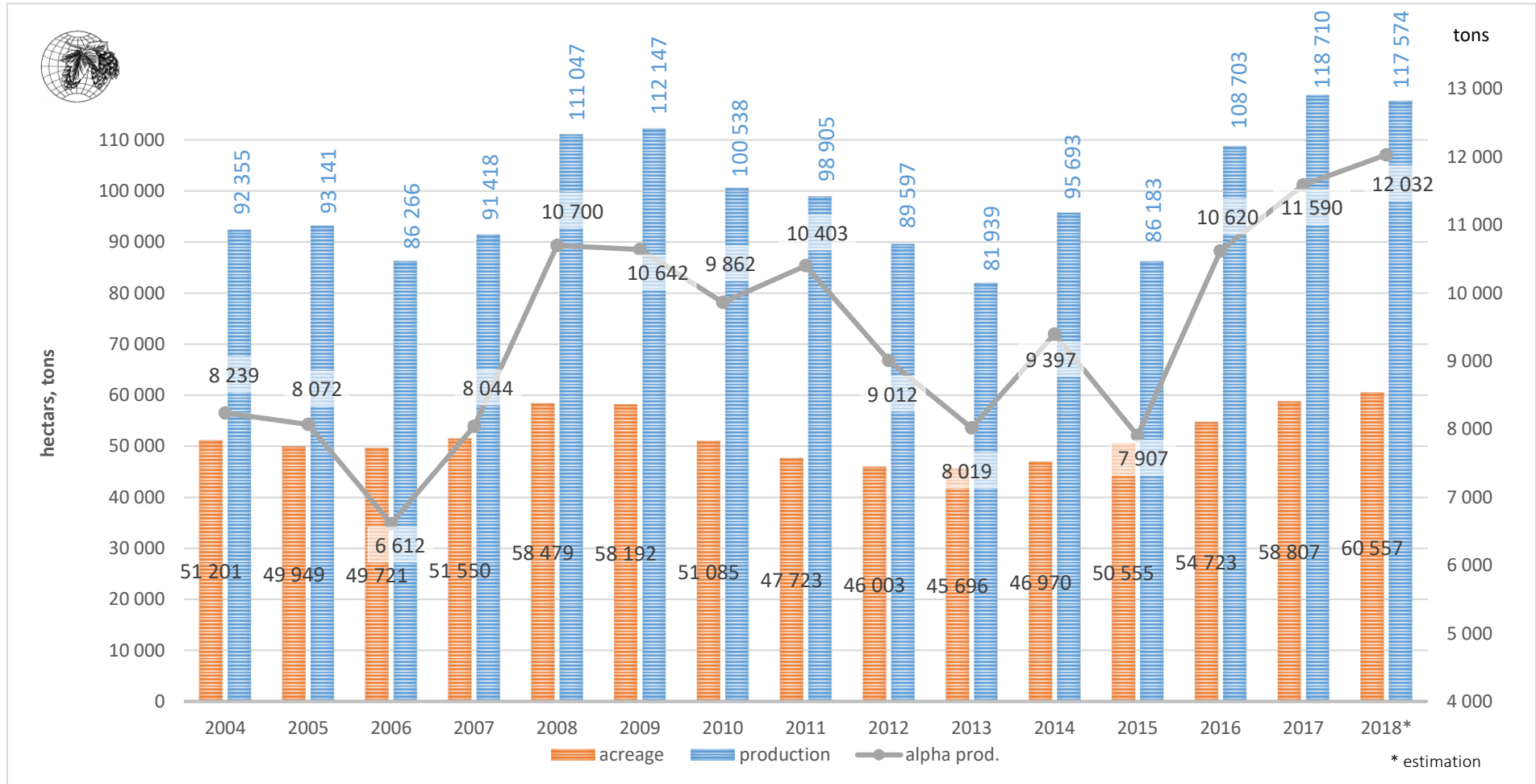
| Country | Hop Acreage 2017 (Hectares, Ha) | | | | | Hop Production 2017 (in MT = 1.000 kg) | | | Alpha acid Prod. MT | Hop Acreage 2018 (Hectares, Ha) estimations | | | | | Hop Production 2018 (in MT = 1.000 kg) estimations | | | Alpha acid Prod. MT |
|---------------------------|------------------------------------|---------------|-----------------------|--------------|---------------|---|---------------|----------------|------------------------|---|---------------|-----------------------|--------------|---------------|--|---------------|----------------|------------------------|
| | Aroma | Alpha | Hop area ¹ | New | Total | Aroma | Alpha | Total | | Aroma | Alpha | Hop area ¹ | New | Total | Aroma | Alpha | Total | |
| Argentina [°] | 95 | 65 | 160 | 0 | 160 | 145 | 70 | 215 | 22 | 100 | 60 | 160 | 0 | 160 | 180 | 100 | 280 | 25 |
| Australia [°] | 446 | 100 | 546 | 85 | 631 | 1 200 | 238 | 1 438 | 203 | 479 | 152 | 631 | 21 | 652 | 1 228 | 354 | 1 582 | 225 |
| Austria | 186 | 58 | 244 | 6 | 250 | 325 | 114 | 439 | 35 | 190 | 58 | 248 | 4 | 252 | 330 | 115 | 445 | 36 |
| Belgium | 114 | 54 | 169 | 11 | 180 | 138 | 98 | 236 | 16 | 126 | 54 | 180 | 3 | 183 | 141 | 76 | 217 | 18 |
| Canada [°] | 219 | 200 | 419 | 0 | 419 | 329 | 300 | 629 | 63 | 219 | 200 | 419 | 0 | 419 | 329 | 300 | 629 | 63 |
| China [°] | 400 | 2 283 | 2 683 | 0 | 2 683 | 544 | 6 500 | 7 044 | 600 | 400 | 2 283 | 2 683 | 0 | 2 683 | 544 | 6 500 | 7 044 | 600 |
| Czech Republic | 4 583 | 46 | 4 629 | 316 | 4 945 | 6 687 | 110 | 6 797 | 270 | 4 684 | 50 | 4 734 | 292 | 5 026 | 5 600 | 100 | 5 700 | 220 |
| France | 401 | 36 | 437 | 44 | 481 | 676 | 87 | 763 | 25 | 424 | 39 | 463 | 33 | 496 | 746 | 87 | 833 | 29 |
| Germany | 10 492 | 7 574 | 18 066 | 1 477 | 19 543 | 19 921 | 21 635 | 41 556 | 4 265 | 10 822 | 8 465 | 19 287 | 857 | 20 144 | 20 300 | 23 700 | 44 000 | 4 950 |
| Japan [°] | 60 | 60 | 120 | 0 | 120 | 130 | 143 | 273 | 30 | 60 | 60 | 120 | 0 | 120 | 130 | 143 | 273 | 30 |
| New Zealand [°] | 371 | 71 | 442 | 30 | 442 | 620 | 140 | 760 | 72 | 371 | 71 | 442 | 89 | 531 | 600 | 122 | 722 | 65 |
| Poland | 622 | 847 | 1 468 | 108 | 1 576 | 1 091 | 1 902 | 2 993 | 248 | 659 | 918 | 1 576 | 0 | 1 576 | 830 | 1 700 | 2 530 | 205 |
| Romania | 73 | 192 | 265 | 5 | 270 | 80 | 160 | 240 | 22 | 73 | 197 | 270 | 7 | 277 | 65 | 130 | 195 | 19 |
| Russia [°] | 220 | 200 | 420 | 50 | 470 | 250 | 250 | 500 | 40 | 220 | 200 | 420 | 50 | 470 | 250 | 250 | 500 | 40 |
| Serbia [°] | 34 | 33 | 67 | 12 | 79 | 58 | 76 | 134 | 11 | 34 | 33 | 67 | 12 | 79 | 58 | 76 | 134 | 11 |
| Slovakia | 138 | 0 | 137 | 0 | 138 | 104 | 0 | 104 | 5 | 138 | 0 | 138 | 0 | 138 | 152 | 0 | 152 | 7 |
| Slovenia | 1 393 | 21 | 1 414 | 176 | 1 590 | 2 731 | 36 | 2 767 | 150 | 1 526 | 21 | 1 547 | 120 | 1 667 | 2 864 | 36 | 2 900 | 155 |
| South Africa [°] | 34 | 390 | 424 | 0 | 424 | 46 | 658 | 710 | 85 | 73 | 354 | 427 | 0 | 427 | 77 | 677 | 754 | 75 |
| Spain | 0 | 537 | 537 | 0 | 537 | 0 | 662 | 662 | 76 | 0 | 537 | 537 | 6 | 537 | 0 | 960 | 960 | 109 |
| Ukraine [°] | 309 | 60 | 369 | 0 | 369 | 400 | 80 | 480 | 30 | 309 | 60 | 369 | 0 | 369 | 400 | 80 | 480 | 30 |
| UK-England | 967 | 0 | 967 | 0 | 967 | 1 780 | 0 | 1 780 | 130 | 972 | 0 | 972 | 5 | 972 | 1 500 | 0 | 1 500 | 120 |
| USA | 17 767 | 4 766 | 22 533 | 1 100 | 22 533 | 33 880 | 14 310 | 48 190 | 5 192 | 18 257 | 5 122 | 23 379 | 846 | 23 379 | 31 402 | 14 342 | 45 744 | 5 000 |
| IHGC | 38 924 | 17 593 | 56 356 | 3 420 | 58 807 | 71 135 | 47 569 | 118 710 | 11 590 | 40 136 | 18 934 | 59 069 | 2 345 | 60 557 | 67 726 | 49 848 | 117 574 | 12 032 |

[°] Since no country updates were available, figures from Paris in 2018 were used.

¹ Acreage without new hop areas

| | | | | | | | | | |
|-------------------------------|--------|--------|--------|--------|--------|--------|---------|--------|-------|
| Difference Σ 2018-2017 | 1 212 | 1 341 | 2 713 | -1 075 | 1 750 | -3 409 | 2 279 | -1 136 | 442 |
| Difference Σ 2018-2013 | 15 119 | -142 | 14 976 | 658 | 14 863 | 29 912 | 5 395 | 35 307 | 4 012 |
| Difference Σ 2018-2008 | 13 108 | -8 429 | 4 677 | -3 042 | 6 165 | 20 246 | -16 011 | 4 235 | 1 380 |

Figure 1: Comparison of IHGC crops 2004 - 2018* (acreage, production, alpha acids production)



International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Austria

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 19,5 | 6,0 | 20,0 | 6,0 | 0,5 | 0,0 |
| Alpha | 15,5 | 13,6 | 16,1 | 14,0 | 0,6 | 0,4 |
| Total | 35,0 | 8,0 | 36,1 | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 100 | | | | | |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:
Austria, 25.08.2018

Member Organization(s):
Hermann Bayer

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

BELGIUM

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | | | 7,5 | 5,0 | | |
| Alpha | | | 10,5 | 12,0 | | |
| Total | | | 18,0 | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 60% | 40% | 40% | 40% | 40% | 40% |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

The extreme drought and heat that gripped Western Europe will also impact the growth and the harvest results of the hop in Belgium.
For the sake of completeness, we mention that since mid July the various Governments in Belgium ban irrigation due to the water scarcity.

Country, Date: 26/07/2018

Member Organization(s): Joris Cambie

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:
Czech Republic

| Hop Area (Ha = Hectares) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|-----------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 4583 | 4684 | 101 | 2,2 |
| Alpha | 46 | 50 | 4 | 8,7 |
| Total | 4629 | 4734 | 105 | 2,3 |

| New Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) |
|----------------------|------------------|---------------------------|
| Aroma | 312 | 290 |
| Alpha | 4 | 2 |
| Total | 316 | 292 |

| TOTAL Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 4895 | 4974 | 79 | 1,6 |
| Alpha | 50 | 52 | 2 | 4,0 |
| Total | 4945 | 5026 | 81 | 1,6 |

| Production MT=Metric Tons | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 6 687 | 5 600 | -1 087 | -16,3 |
| Alpha | 110 | 100 | -10 | -9,1 |
| Total | 6 797 | 5 700 | -1 097 | -16,1 |

| Yield MT/Ha | Year N-1 2017 | Year N 2018 (estimate) | Difference % |
|----------------|------------------|---------------------------|-----------------|
| Aroma | 1,37 | 1,13 | |
| Alpha | 2,20 | 1,92 | |
| Total | 1,37 | 1,13 | |

| Main Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--------------------------------------|------------------------------|----------------------------|------------|------------------------|----------------------|-----------------------|
| Aroma | | | | | | |
| SAAZ | 4317 | 4352 | 35 | 3,0 | | |
| Sládek | 295 | 322 | 27 | 6,2 | | |
| Premiant | 165 | 170 | 5 | 7,6 | | |
| Saaz Late | 44 | 46 | 2 | 3,0 | | |
| Kazbek | 34 | 34 | 0 | 5,5 | | |
| Saaz Special | 26 | 34 | 8 | | | |
| | | | | | | |
| | | | | | | |
| Alpha | | | | | | |
| Agnus | 42 | 42 | 0 | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

| |
|-----------------------------------|
| Country: Czech Republic |
|-----------------------------------|

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 257,0 | | 210,0 | | | |
| Alpha | 13,0 | | 10,0 | | | |
| Total | 270,0 | | 220,0 | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 100 | 100 | 97 | 80 | 75 | 60 |

| Unsold Hops (Mt) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | 0 |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | 7,3 | 7,8 | | | farmer price |
| Alpha Hops | 5 | 5,2 | | | farmer price |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:
23.07.2018

Member Organization(s):
Hop Growers Union of the Czech Rep.

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

France

| Hop Area (Ha = Hectares) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|-----------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 401 | 424 | 23 | 105,8% |
| Alpha | 36 | 39 | 3 | 107,8% |
| Total | 437 | 463 | 26 | 106,0% |

| New Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) |
|----------------------|------------------|---------------------------|
| Aroma | 41 | 29 |
| Alpha | 3 | 4 |
| Total | 44 | 33 |

| TOTAL Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 442 | 454 | 12 | 102,7% |
| Alpha | 39 | 42 | 3 | 108,8% |
| Total | 481 | 496 | 15 | 103,2% |

| Production MT=Metric Tons | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 676 | 746 | 70 | 110,4% |
| Alpha | 87 | 87 | 0 | 100,0% |
| Total | 763 | 833 | 70 | 109,2% |

| Yield MT/Ha | Year N-1 2017 | Year N 2018 (estimate) | Difference % |
|----------------|------------------|---------------------------|-----------------|
| Aroma | 1,6 | 1,6 | 1,0 |
| Alpha | 2,4 | 2,1 | 0,9 |
| Total | 1,8 | 1,7 | 1,0 |

| Main Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--------------------------------------|------------------------------|----------------------------|------------|------------------------|----------------------|-----------------------|
| Aroma | | | | | | |
| Strisselspalt | 181 | 175,5 | -5,5 | 2,00 | | |
| Aramis | 53 | 58,1 | 5,1 | 5,80 | | |
| Tradition | 28,3 | 22,2 | -6,1 | 4,80 | | |
| Triskel | 39 | 47,9 | 8,9 | 3,50 | | |
| Fuggle | 48,5 | 54,9 | 6,4 | 4,60 | | |
| Golding | 45 | 46,8 | 1,8 | 3,50 | | |
| Challenger | 6 | 6 | 0 | 6,30 | | |
| Barbe-Rouge | 10,6 | 12,1 | 1,5 | 6,00 | | |
| Mistral | 7 | 8,9 | 1,9 | 5,50 | | |
| Cascade | 4,5 | 2,7 | -1,8 | | | |
| Alpha | | | | | | |
| Columbus | 4,3 | 5,4 | 1,1 | 10,00 | | |
| Brewers Gold | 16 | 15,7 | -0,3 | 5,50 | | |
| Nugget | 7,1 | 9,2 | 2,1 | 10,00 | | |
| Magnum | 4,7 | 5,8 | 1,1 | 12,00 | | |
| Target | 5,7 | 5,65 | -0,05 | 10,50 | | |

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

France

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 17,2 | 3,2 | 22,4 | 3,0 | 5,2 | 1,3 |
| Alpha | 7,8 | 7,4 | 6,1 | 7,0 | -1,7 | 0,8 |
| Total | 25,0 | 3,9 | 28,5 | 3,4 | 3,5 | 1,1 |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 90 | 80 | 80 | 60 | 30 | 30 |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | 676 | 87 | 763 |
| - Sold Production | | 666 | 87 | 753 |
| = Unsold Hops | | 10 | 0 | 10 |
| % unsold Hops | | 1,48 | 0,00 | 1,31 |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:
July 25, 2018

Member Organization(s):
AGPH Francis Heitz

International Hop Growers' Convention

IHGC-Economic Commission: July 2018 - León, Spain

Country:

Germany

| Hop area (ha) | Year N-1 2017 | Year N 2018 | Difference N - (N-1) | Difference % |
|-----------------|---------------|-------------|----------------------|--------------|
| Aroma | 10492 | 10822 | 330 | 3,1 |
| Alpha | 7574 | 8465 | 891 | 11,8 |
| Total | 18066 | 19287 | 1221 | 6,8 |

| New Hop Area (ha) | Year N-1 2017 | Year N 2018 |
|---------------------|---------------|-------------|
| Aroma | 583 | 346 |
| Alpha | 894 | 511 |
| Total | 1477 | 857 |

| TOTAL Hop area (ha) | Year N-1 2017 | Year N 2018 | Difference N - (N-1) | Difference % |
|-----------------------|---------------|-------------|----------------------|--------------|
| Aroma | 11075 | 11168 | 93 | 0,8 |
| Alpha | 8468 | 8976 | 508 | 6,0 |
| Total | 19543 | 20144 | 601 | 3,1 |

| Production MT | Year N-1 2017 | Year N 2018 estimate | Difference N - (N-1) | Difference % |
|---------------|---------------|----------------------|----------------------|--------------|
| Aroma | 19 921 | 20 300 | 379 | 1,9 |
| Alpha | 21 635 | 23 700 | 2 065 | 9,5 |
| Total | 41 556 | 44 000 | 2 444 | 5,9 |

| Yield MT/HA. | Year N-1 2017 | Year N 2018 estimate | Difference % |
|--------------|---------------|----------------------|--------------|
| Aroma | 1,8 | 1,8 | 1,1 |
| Alpha | 2,6 | 2,6 | 3,3 |
| Total | 2,1 | 2,2 | 2,7 |

| Main Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--------------------------------|------------------------|----------------------|------------|------------------|----------------|--------------------|
| Aroma | | | | | | |
| Perle | 2966 | 3003 | 37 | 6,9 | 7,6 | 0,7 |
| Hall.Tradition | 2704 | 2712 | 8 | 5,7 | 6,2 | 0,5 |
| Hersbrucker | 915 | 924 | 9 | 2,3 | 2,9 | 0,6 |
| Hallertauer | 723 | 687 | -36 | 3,5 | 4 | 0,5 |
| Tettnanger | 747 | 750 | 3 | 3,6 | 3,8 | 0,2 |
| Spalter Select | 532 | 578 | 46 | 4,6 | 4,9 | 0,3 |
| Saphir | 473 | 515 | 42 | 3 | 4 | 1 |
| Mand. Bavaria | 356 | 321 | -35 | 7,3 | 7,5 | 0,2 |
| North. Brewer | 300 | 293 | -7 | 7,8 | 9,1 | 1,3 |
| Amarillo | 300 | 300 | 0 | | | |
| Spalter | 121 | 120 | -1 | 3,2 | 3,7 | 0,5 |
| Alpha | | | | | | |
| Herkules | 5797 | 6309 | 512 | 15,5 | 16,7 | 1,2 |
| Hall. Magnum | 2011 | 1992 | -19 | 12,6 | 12,8 | 0,2 |
| Hall.Taurus | 284 | 258 | -26 | 15,9 | 16,5 | 0,6 |
| Nugget | 131 | 128 | -3 | 10,8 | 11,4 | 0,6 |
| Polaris | 174 | 225 | 51 | 19,6 | 19,3 | -0,3 |

International Hop Growers' Convention

IHGC-Economic Commission: July 2018 - León, Spain

| |
|----------------------------|
| Country: Germany |
|----------------------------|

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | estimate | % | | % |
| Aroma | 1092,0 | 5,5 | 1150,0 | 5,7 | 58,0 | 0,2 |
| Alpha | 3173,0 | 14,7 | 3800,0 | 16,0 | 627,0 | 1,4 |
| Total | 4 265 | 10,3 | 4950,0 | 11,3 | 685,0 | 1,0 |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric Tons | 42000 | 38877 | 37516 | 27691 | 25181 | 18852 |
| % Crop / Year N | 95 | 88 | 85 | 63 | 57 | 43 |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|--------|--------|--------|
| Total Hop Production | | 19 921 | 21 635 | 41 556 |
| - Sold Production | | 19 921 | 21 635 | 41 556 |
| = Unsold Hops | | 0,00 | 0,00 | 0,00 |
| % unsold Hops | | 0 | 0 | 0 |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. 2017 vs. 2016 | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|--------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | 6,57 | 9,16 | | 39,40 | Farmer Price |
| Alpha Hops | 6,59 | 10,35 | | 57,10 | Farmer Price |
| Average Price | 6,58 | 9,74 | | 48,00 | Farmer Price |
| Contract Prices | | | | | |
| Aroma Hops | 5,36 | 5,51 | | 2,80 | Farmer Price |
| Alpha Hops | 4,39 | 4,36 | | -0,70 | Farmer Price |
| Average Price | 4,88 | 4,9 | | 0,40 | Farmer Price |
| Average Prices | | | | | |
| Aroma Hops | 5,6 | 5,9 | | 5,40 | Farmer Price |
| Alpha Hops | 4,8 | 5 | | 4,20 | Farmer Price |
| AVERAGE | 5,21 | 5,4 | | 3,60 | Farmer Price |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:

Germany

24.07.2018

Verband deutscher Hopfenpflanzer

gez. Brunner

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Poland

| Hop Area (Ha = Hectares) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|-----------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 622 | 659 | 37 | 5,9 |
| Alpha | 847 | 918 | 71 | 8,4 |
| Total | 1468 | 1576 | 108 | 7,3 |

| New Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) |
|----------------------|------------------|---------------------------|
| Aroma | 37 | ? |
| Alpha | 71 | ? |
| Total | 108 | ? |

| TOTAL Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 659 | 659 | 0 | |
| Alpha | 918 | 918 | 0 | |
| Total | 1576 | 1576 | 0 | |

| Production MT=Metric Tons | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 1 091 | ? | | |
| Alpha | 1 902 | ? | | |
| Total | 2 993 | ? | | |

| Yield MT/Ha | Year N-1 2017 | Year N 2018 (estimate) | Difference % |
|----------------|------------------|---------------------------|-----------------|
| Aroma | 1,8 | ? | |
| Alpha | 2,3 | ? | |
| Total | 2,0 | ? | |

| Main Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--------------------------------------|------------------------------|----------------------------|------------|------------------------|----------------------|-----------------------|
| Aroma | | | | | | |
| Lubelski | 419,29 | | | | | |
| Lomik | 2,76 | | | | | |
| Perle | 48,78 | | | | | |
| Sybilla | 98,49 | | | | | |
| H. Tradition | 70,42 | | | | | |
| Puławski | 6,72 | | | | | |
| Triskel | 0,97 | | | | | |
| Żatecki | 1 | | | | | |
| Cascade | 9,79 | | | | | |
| Centennial | 0,2 | | | | | |
| Crystal | 0,1 | | | | | |
| Alpha | | | | | | |
| Marynka | 273,11 | | | | | |
| Magnum | 520,18 | | | | | |
| Magnat | 102,32 | | | | | |
| Izabella | 0,4 | | | | | |
| lunga | 9,67 | | | | | |
| Chinook | 2,01 | | | | | |
| Columbus | 0,1 | | | | | |
| Rody hodowlane | 1,41 | | | | | |
| Taurus | 7,66 | | | | | |
| Oktawia | 0,78 | | | | | |

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Poland

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 47,6 | 4,4 | | | | |
| Alpha | 200,5 | 10,5 | | | | |
| Total | 248,1 | 8,3 | | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | | | | | | |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | 1091 | 1902 | 2993 |
| - Sold Production | | 1091 | 1902 | 2993 |
| = Unsold Hops | | 0 | 0 | 0 |
| % unsold Hops | | 0 | 0 | 0 |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | 4,48 | | | |
| Alpha Hops | | 5,95 | | | |
| Average Price | | 5,22 | | | |
| Contract Prices | | | | | |
| Aroma Hops | | 4,93 | | | |
| Alpha Hops | | 4,84 | | | |
| Average Price | | 4,89 | | | |
| Average Prices | | | | | |
| Aroma Hops | | 4,71 | | | |
| Alpha Hops | | 5,4 | | | |
| AVERAGE | | 5,06 | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Euro currency rate was calculated as 1 EUR = 4.2 zł.

In Poland we are having some problems with drought, not enough raining. West side is not that bad, but it will be better to have some water. Hop is more less in 1/4 up to 1/3 of construction height. It is looking very nice until now. We had some big problems with temperatures this year - March was cold, than beginning of April was already quite warm and then in the middle of April high temperatures hit the fields, pushing all crops actually to grow fast.

Country, Date:
Poland, 25.07.2018

Member Organization(s):
Jan Szalas

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Romania

| Hop Area (Ha = Hectares) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|-----------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 73 | 73 | 0 | |
| Alpha | 192 | 197 | 5 | |
| Total | 265 | 270 | 5 | |

| New Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) |
|----------------------|------------------|---------------------------|
| Aroma | 0 | 2 |
| Alpha | 5 | 5 |
| Total | 5 | 7 |

| TOTAL Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 73 | 75 | 2 | 2,7 |
| Alpha | 197 | 202 | 5 | 2,5 |
| Total | 270 | 277 | 7 | 2,6 |

| Production MT=Metric Tons | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 80 | 65 | -15 | -18,8 |
| Alpha | 160 | 130 | -30 | -18,8 |
| Total | 240 | 195 | -45 | -18,8 |

| Yield MT/Ha | Year N-1 2017 | Year N 2018 (estimate) | Difference % |
|----------------|------------------|---------------------------|-----------------|
| Aroma | 1,10 | 0,89 | 81,3 |
| Alpha | 0,83 | 0,66 | 79,2 |
| Total | 0,91 | 0,72 | 79,7 |

| Main Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--------------------------------------|------------------------------|----------------------------|------------|------------------------|----------------------|-----------------------|
| Aroma | | | | | | |
| Perle | 43 | 43 | 0 | 9,0 | 9,2 | 0,2 |
| Huller Bitterer | 30 | 30 | 0 | 7,5 | 7,8 | 0,3 |
| Tradition | | 5 | 5 | 0,0 | 0,0 | 0,0 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Alpha | | | | | | |
| Magnum | 103 | 108 | 5 | 12,6 | 13,0 | 0,4 |
| Merkur | 24 | 24 | 0 | 12,5 | 13,0 | 0,5 |
| Brewers Gold | 70 | 70 | 0 | 7,8 | 8,0 | 0,2 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Romania

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 6,2 | 7,8 | 5,3 | 8,2 | -0,9 | -14,5 |
| Alpha | 15,5 | 9,7 | 13,7 | 10,5 | -1,8 | -11,6 |
| Total | 21,7 | 9,0 | 19,0 | 9,7 | -2,7 | -12,4 |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | 200 | 220 | 240 | 270 | 290 | 300 |
| % Crop / Year N | 97,5 | 100 | 100 | 100 | 100 | 100 |

| Unsold Hops (M1) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | 80 | 160 | 240 |
| - Sold Production | | 80 | 160 | 240 |
| = Unsold Hops | | 0 | 0 | 0 |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

extremely low rainfall in April and May
very high temperature in May

Country, Date:
23.08.2018

Member Organization(s):
Acatiu Mora

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

| |
|-----------------------------|
| Country: Slovakia |
|-----------------------------|

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | | | | | | |
| Alpha | | | | | | |
| Total | | | | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | 145 | | | | | |
| % Crop / Year N | | | | | | |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | 7 | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:
27.07.2018

Member Organization(s):
Marián Menšík, Slovchmel'

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

Slovenia

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | | | | | | |
| Alpha | | | | | | |
| Total | 150,0 | 5,4 | 155,0 | 5,4 | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 85 | 80 | 75 | 70 | 60 | N.A. |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | 2 731 | 36 | 2 767 |
| - Sold Production | | 2 731 | 36 | 2 767 |
| = Unsold Hops | | 0 | 0 | 0 |
| % unsold Hops | | 0 | 0 | 0 |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|------------------------|-----------------|-----------------|---------------|---------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | 7.5 | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | 5.2 | 6.6 | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Hop market encouraged growers to enlarge their acreage with Styrian aroma (flavor) hops. Areas with new hops in Slovenia include varieties Aurora, Styrian golding and other domestic fine aroma (flavor) hops - such as Styrian Kolibri, Styrian Eagle, Styrian Wolf and Styrian Cardinal. Data on average contract price for hops in 2017 origin from the company HEI.

Styrian hops (PGI) from Slovenia - a good choice for global craft brewers.

Country, Date:
Slovenia, July 19, 2018

Member Organization(s):
Hop Growers of Slovenia /
Hmezad exim / Inbarco

International Hop Growers' Convention

IHGC-Economic Committee: July 2018 - León, Spain

Country:

SPAIN

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | | | | | | |
| Alpha | 75,9 | 11,5 | 109,0 | | 33,1 | |
| Total | 75,9 | 11,5 | 109,0 | | 33,1 | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | 960 | | | | | |
| % Crop / Year N | | | | | | |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | 4,6 | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Country, Date:

24.07.2018

Member Organization(s):

LUPULOS DE LEÓN SAT

International Hop Growers' Convention

IHGC-Economic Commission: July 2018 - León, Spain

Country:

UK

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | | | | | | |
| Alpha | | | | | | |
| Total | | | | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 85 | 80 | 70 | 60 | 55 | |

| Unsold Hops (MT) : Crop Year (N-1) | 2017 | Aroma | Alpha | Total |
|------------------------------------|------|-------|-------|-------|
| Total Hop Production | | | | 1780 |
| - Sold Production | | | | 1780 |
| = Unsold Hops | | | | 0 |
| % unsold Hops | | | | None |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Alpha Hops | | | | | |
| AVERAGE | | | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Overall the crop is in good health regarding pest and disease, however after 8 weeks of little to no precipitation and with temperatures around thirty degrees Celsius most days, the UK crop is starting to show signs of stress. At best the crop will be average to enable forward contracts to be fulfilled but if the heat continues without any precipitation, we could be looking at a below average crop.

Country, Date: 26.07.2018

Member Organization(s): BHA

International Hop Growers' Convention

Country:

USA

IHGC-Economic Committee: July, 2018 - León, Spain

| Hop Area (Ha = Hectares) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|-----------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 17 767 | 18 257 | 490 | 2,8% |
| Bitter | 4 766 | 5 122 | 356 | 7,5% |
| Total | 22 533 | 23 379 | 846 | 3,8% |

| New Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) |
|----------------------|------------------|---------------------------|
| Aroma | | |
| Bitter | | |
| Total | | |

| TOTAL Hop Area (Ha) | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 17 767 | 18 257 | 490 | 2,8% |
| Bitter | 4 766 | 5 122 | 356 | 7,5% |
| Total | 22 533 | 23 379 | 846 | 3,8% |

| Production MT=Metric Tons | Year N-1 2017 | Year N 2018 (estimate) | Difference N - (N-1) | Difference % |
|------------------------------|------------------|---------------------------|-------------------------|-----------------|
| Aroma | 33 880 | 31 402 | -2 478 | -7,3% |
| Bitter | 14 310 | 14 342 | 32 | 0,2% |
| Total | 48 190 | 45 744 | -2 446 | -5,1% |

| Yield MT/Ha | Year N-1 2017 | Year N 2018 (estimate) | Difference % | Pounds/Acre |
|----------------|------------------|---------------------------|-----------------|-------------|
| Aroma | 1,91 | 1,72 | -9,80% | 1 535 |
| Bitter | 3,00 | 2,80 | -6,74% | 2 498 |
| Total | 2,14 | 1,96 | -8,51% | 1 746 |

| Individual Varieties (Ha = Hectares) | Year N-1 Total Acreage | Year N Total Acreage | Difference | Year N-1 Alpha % | Year N Alpha % | Difference N-(N-1) |
|--|------------------------------|----------------------------|------------|------------------------|----------------------|-----------------------|
| Aroma | | | | 9,2% | | |
| Azacca™, ADHA-483 | 232 | 221 | | | | |
| Cascade | 3 010 | 2 432 | | | | |
| Centennial | 2 160 | 1 968 | | | | |
| Citra®, HBC 394 | 2 138 | 2 692 | | | | |
| Chinook | 1 020 | 1 149 | | | | |
| El Dorado | 267 | 225 | | | | |
| Mosaic™, HBC 369 | 1 122 | 1 120 | | | | |
| Simcoe®, YCR 14 | 1 821 | 1 585 | | | | |
| Willamette | 671 | 567 | | | | |
| Bitter | | | | 14,5% | | |
| Apollo™ | 375 | 415 | | | | |
| Bravo™ | 255 | 150 | | | | |
| CTZ | 671 | 865 | | | | |
| Nugget | 592 | 601 | | | | |
| Summit™ | 654 | 652 | | | | |
| Super Galena™ | 200 | 274 | | | | |

International Hop Growers' Convention

IHGC-Economic Committee: July, 2018 - León, Spain

Country:

USA

| Alpha Prod. | Year N-1 | 2017 | Year N | 2018 | Difference | N-(N-1) |
|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
| Metric Tons | Metric Tons | Av. Contents | Metric Tons | Av. Contents | Metric Tons | Av. Contents |
| | | % | (estimate) | % | | % |
| Aroma | 3 117 | 9,2 | | | | |
| Bitter | 2 075 | 14,5 | | | | |
| Total | 5 192 | 10,6 | | | | |

| Contract | Year N | Year N+1 | Year N+2 | Year N+3 | Year N+4 | Year N+5 |
|-----------------|--------|----------|----------|----------|----------|----------|
| Situation | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Metric tons | | | | | | |
| % Crop / Year N | 98 | 95 | 65 | 40 | 30 | 25 |

| Unsold Hops (MT) : Crop Year (N-1) | 2018 | Aroma | Bitter | Total |
|------------------------------------|------|-------|--------|-------|
| Total Hop Production | | | | |
| - Sold Production | | | | |
| = Unsold Hops | | | | |
| % unsold Hops | | | | |

| Hop Prices Euro / Kg | Year (N-2) 2016 | Year (N-1) 2017 | Year (N) 2018 | % Diff. N vs. (N-1) | Kind of Price |
|-------------------------|--------------------|--------------------|------------------|------------------------|---------------|
| Spot Prices | | | | | |
| Aroma Hops | | | | | |
| Bitter Hops | | | | | |
| Average Price | | | | | |
| Contract Prices | | | | | |
| Aroma Hops | | | | | |
| Bitter Hops | | | | | |
| Average Price | | | | | |
| Average Prices | | | | | |
| Aroma Hops | | | | | |
| Bitter Hops | | | | | |
| AVERAGE | US\$5.72/lb | US\$5.92/lb | | | |
| | 10.46 Euro/kg | 10.83 Euro/kg | | | |

COMMENTS ON HOP PRODUCTION AND MARKET SITUATION

Exchange rate \$1 USD = 0.83 Euro (3 MAY 2018)

Alpha and aroma classifications are based on the IHGC list of World Hop Varieties.

Varieties listed in the "Other" category of US statistical reports published by USDA-NASS are assumed to be 50% aroma and 50% bitter.

Non-Pacific Northwest acreage is assumed to be 80% aroma and 20% bitter.

The USDA statistical reporting system is voluntary, and individual varieties are not reported if three or fewer growers have the variety in each state.

Country, Date:
USA

VII.18

Member Organization(s):
Hop Growers of America

Figure 2: Australia hop crops 2004 - 2018

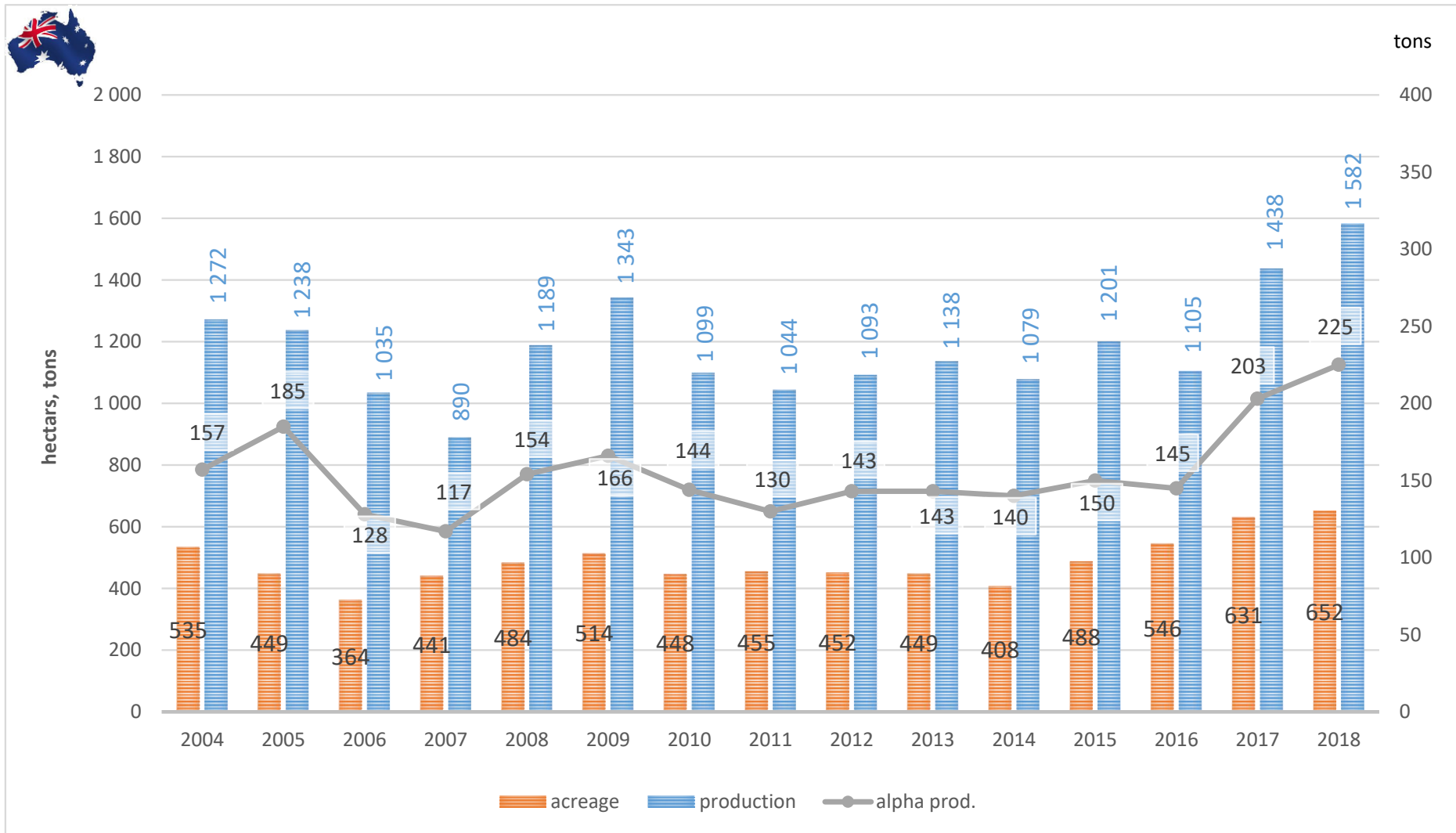


Figure 3: Austria hop crops 2004 - 2018*

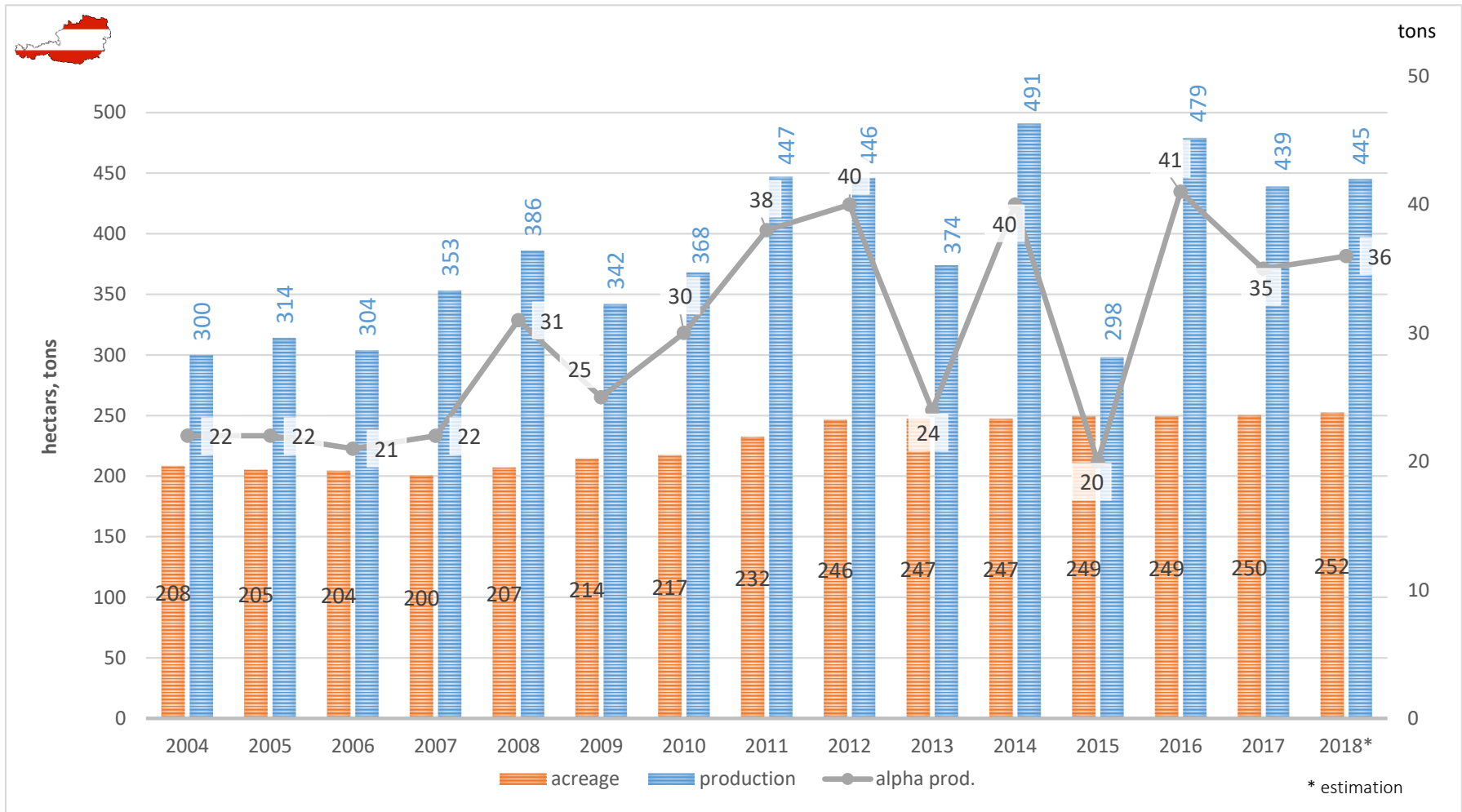


Figure 4: Belgium hop crops 2004 - 2018*

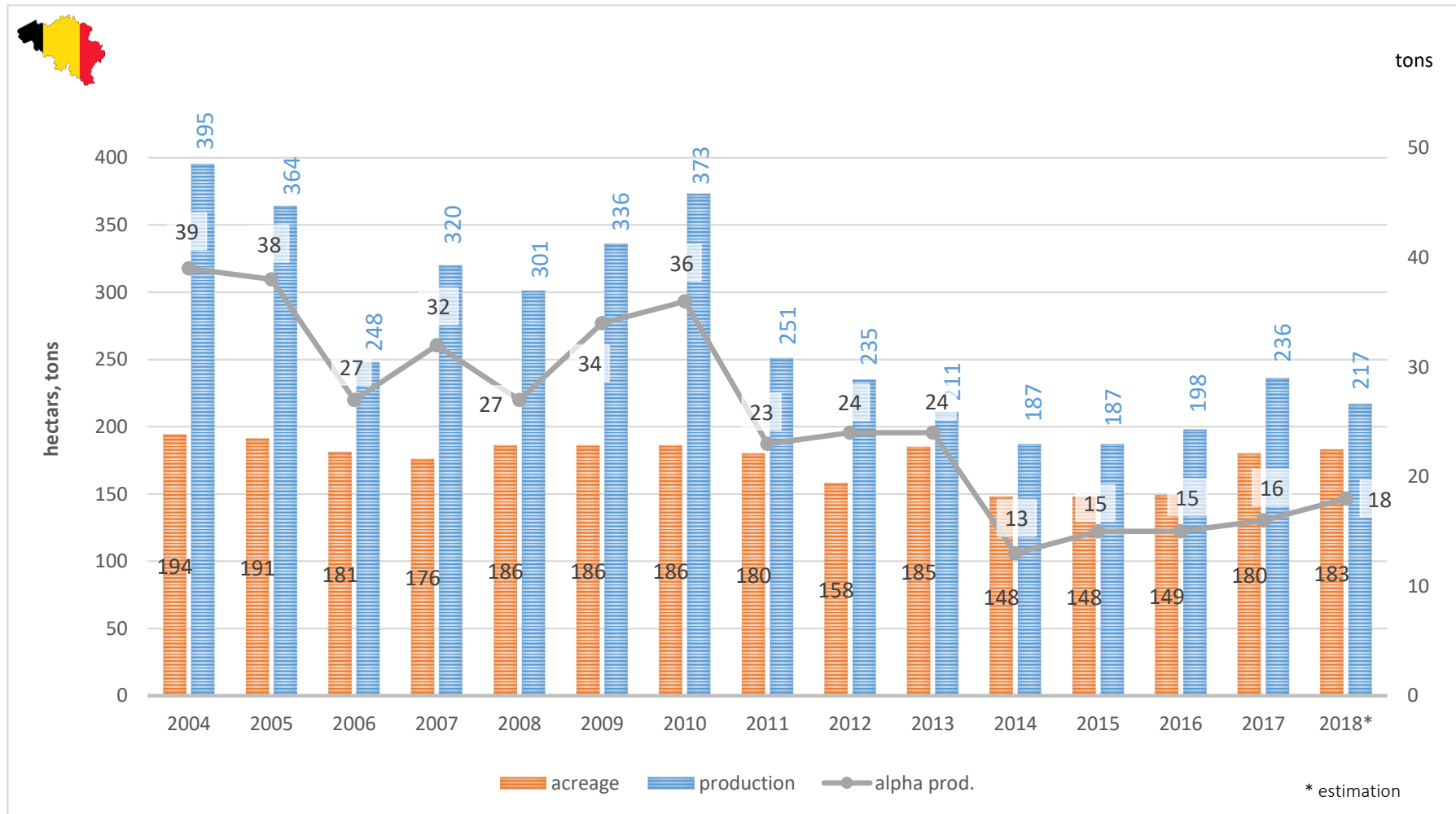


Figure 5: China hop crops 2004 - 2018*

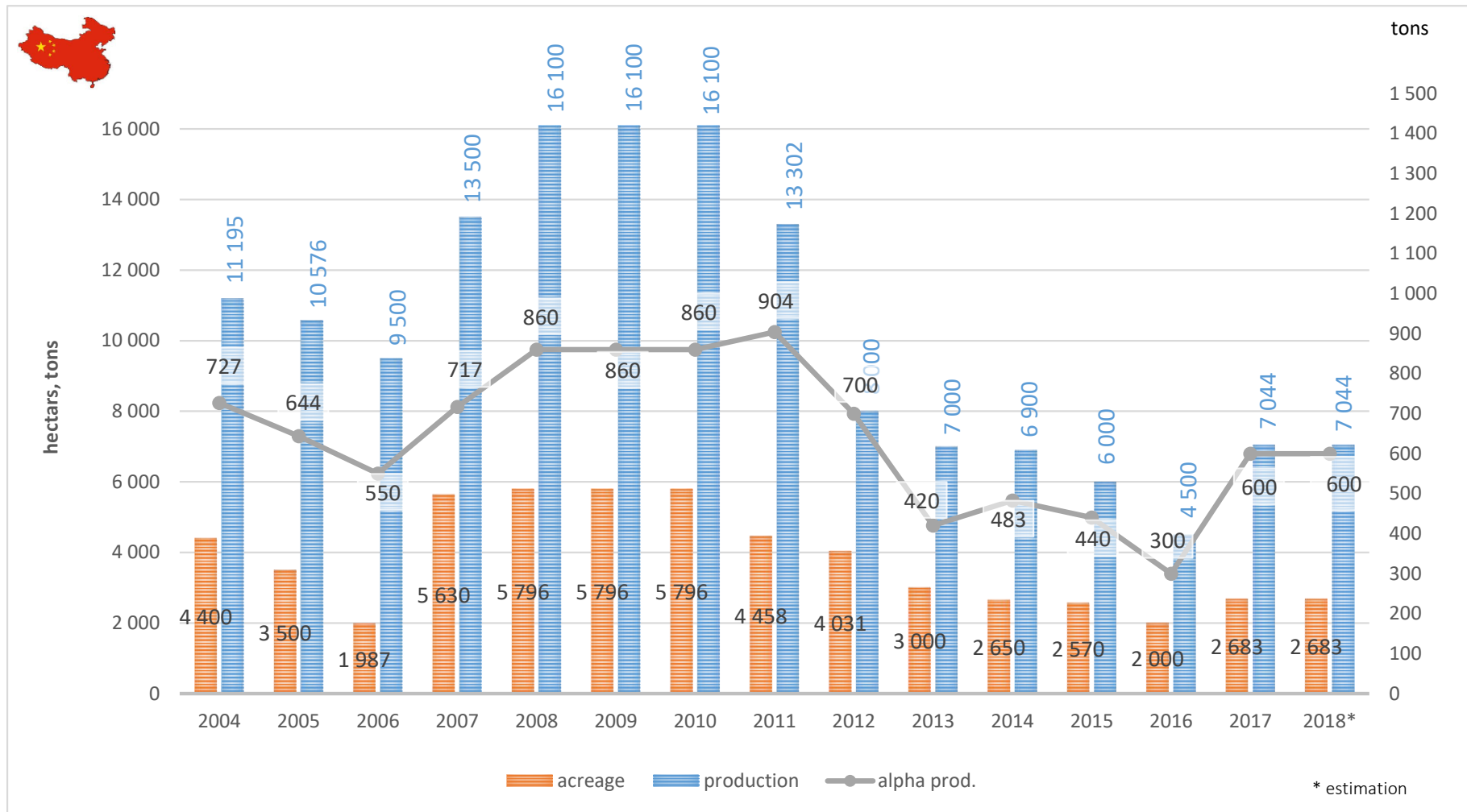


Figure 6: Czech Republic hop crops 2004 - 2018*

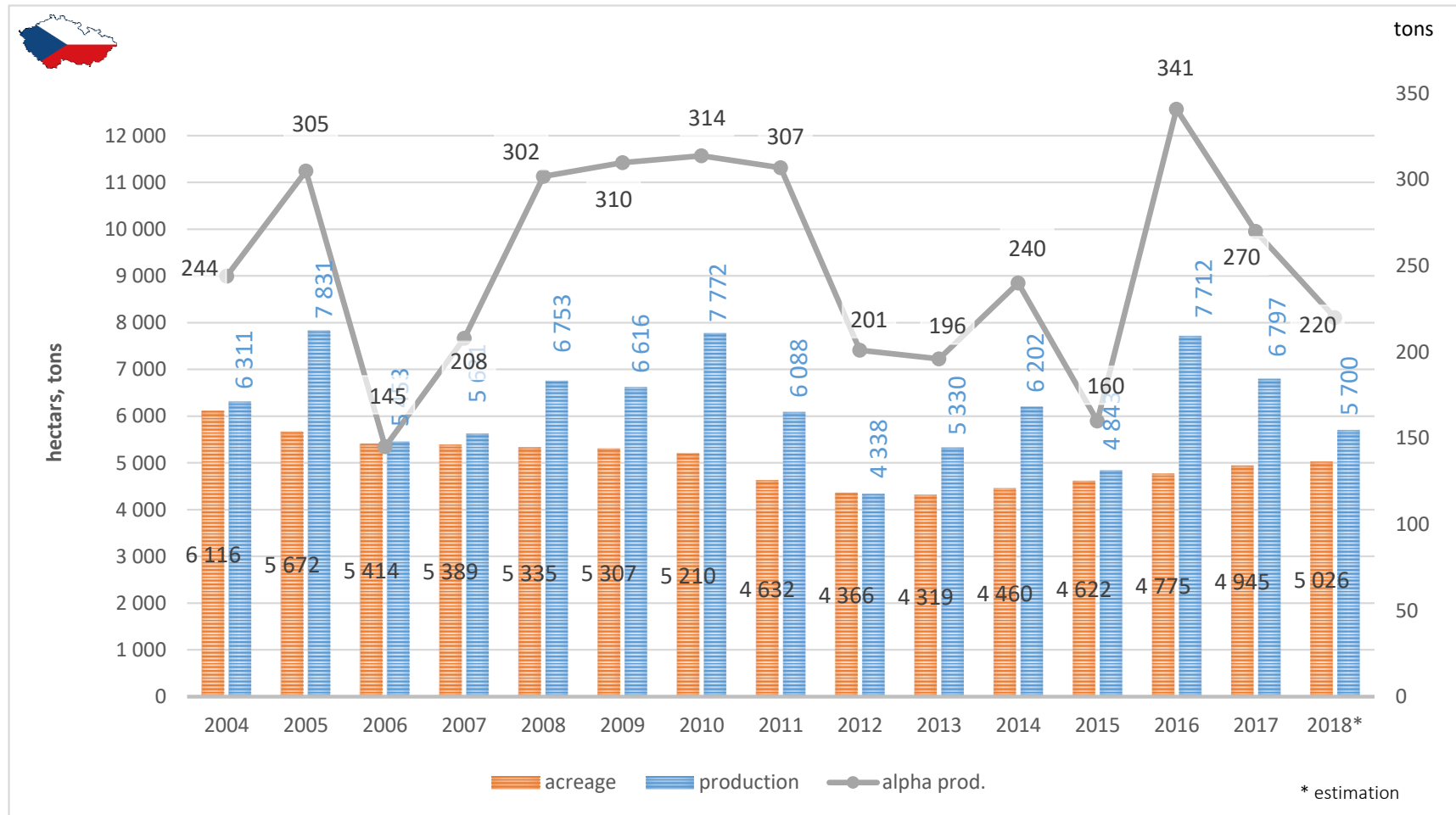


Figure 7: France hop crops 2004 - 2018*

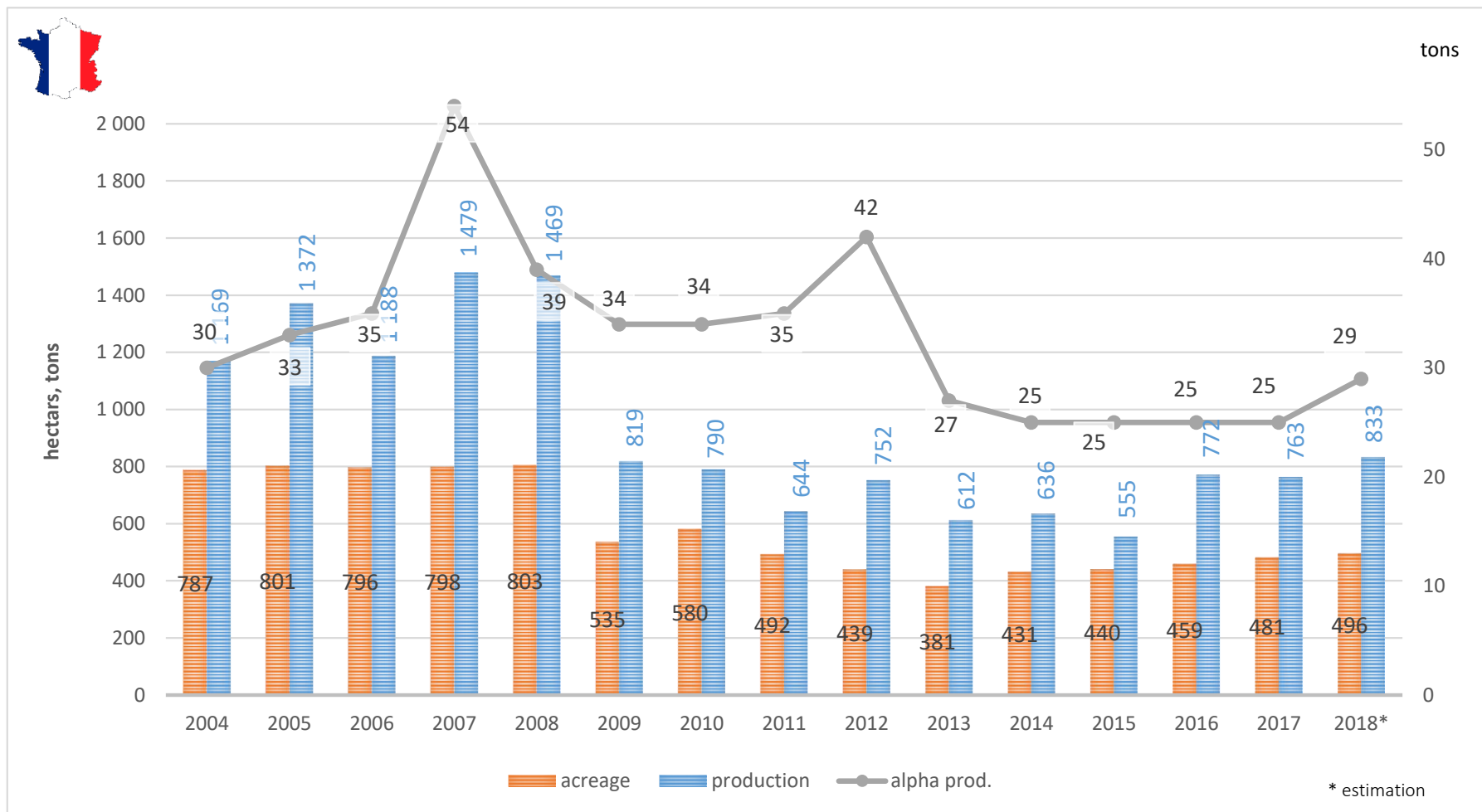


Figure 8: Germany hop crops 2004 - 2018*

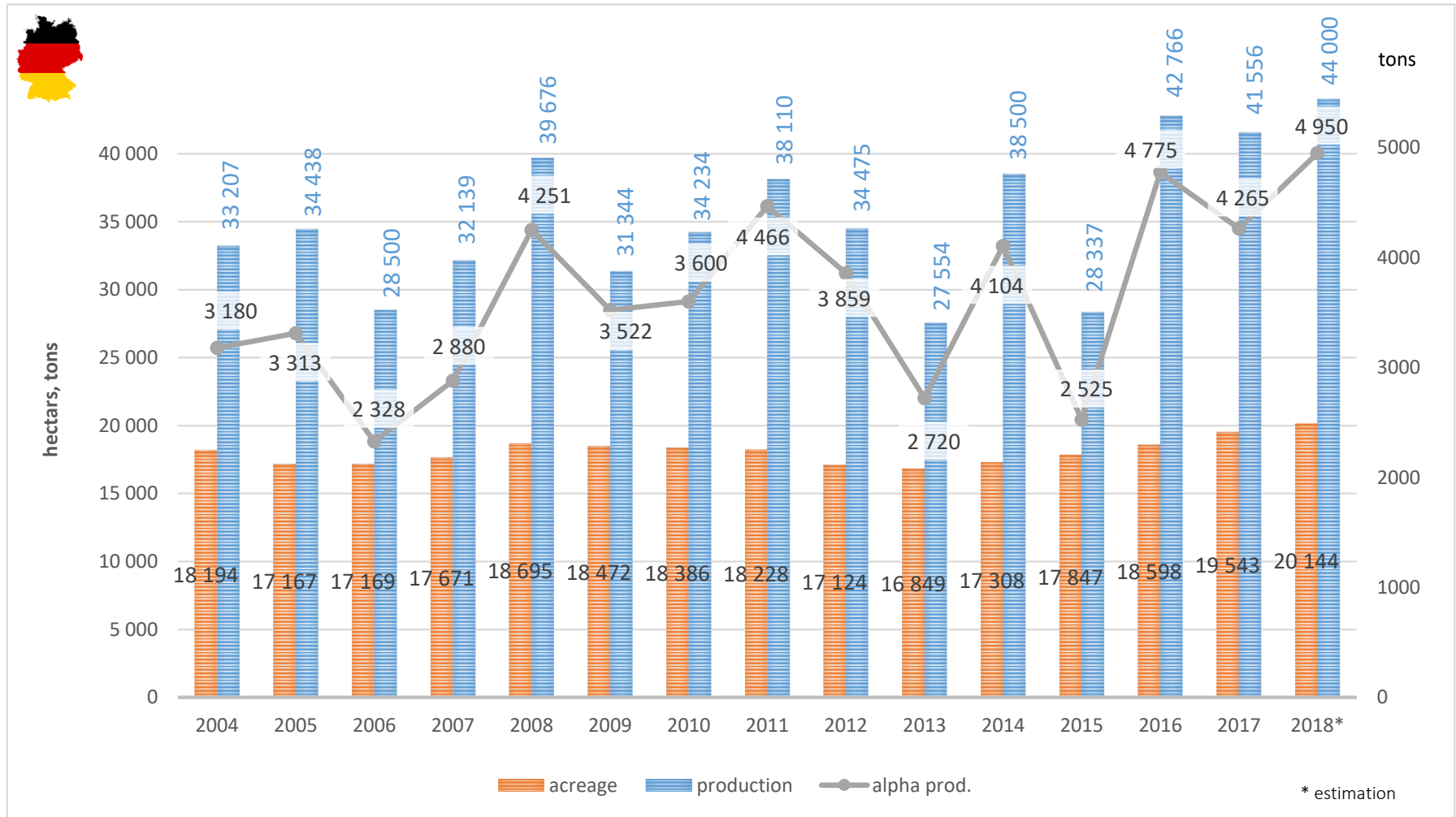


Figure 9: New Zealand hop crops 2004 - 2018

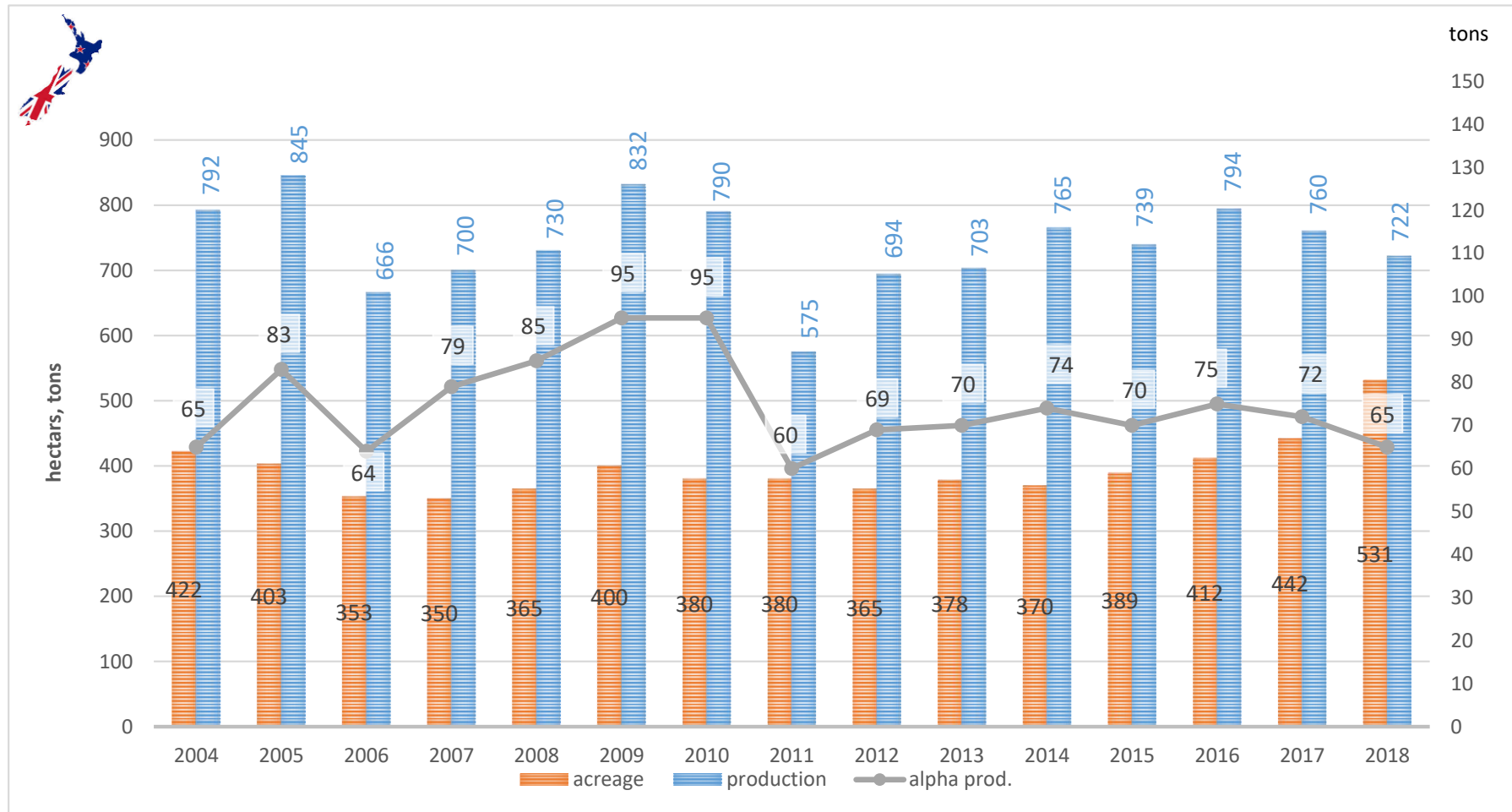


Figure 10: Poland hop crops 2004 - 2018*

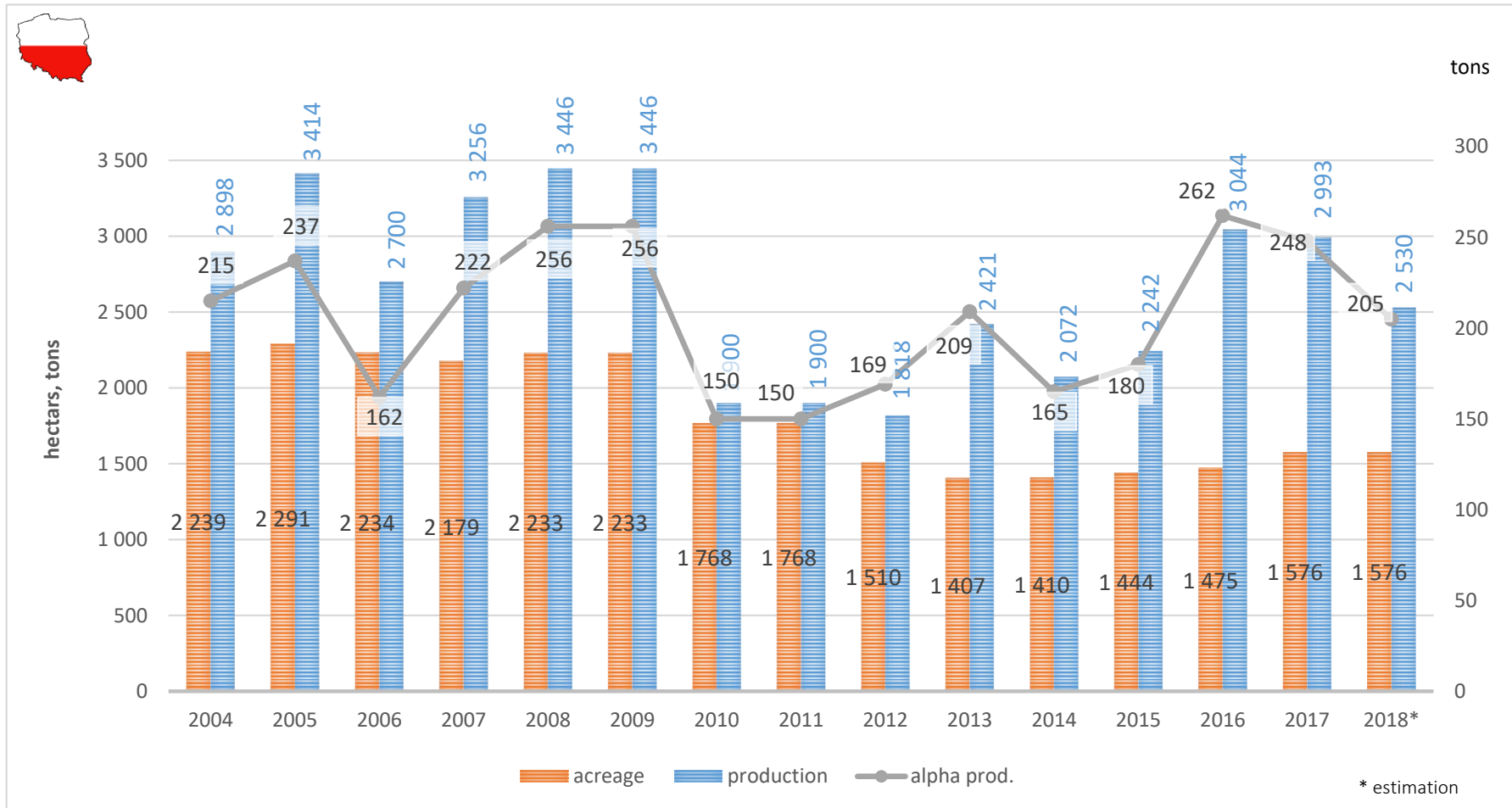


Figure 11: Romania hop crops 2004 - 2018*

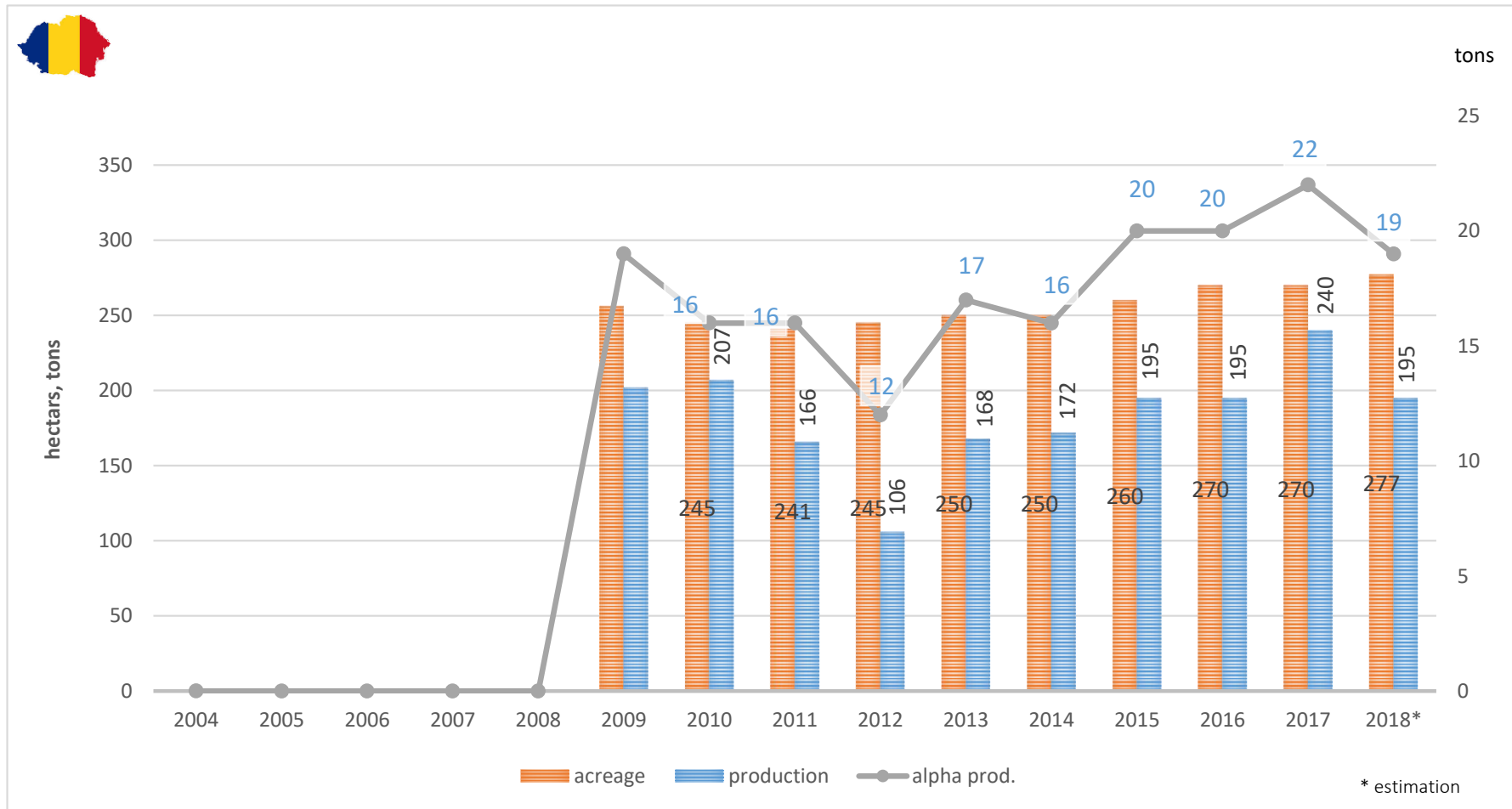


Figure 12: Slovakia hop crops 2004 - 2018*

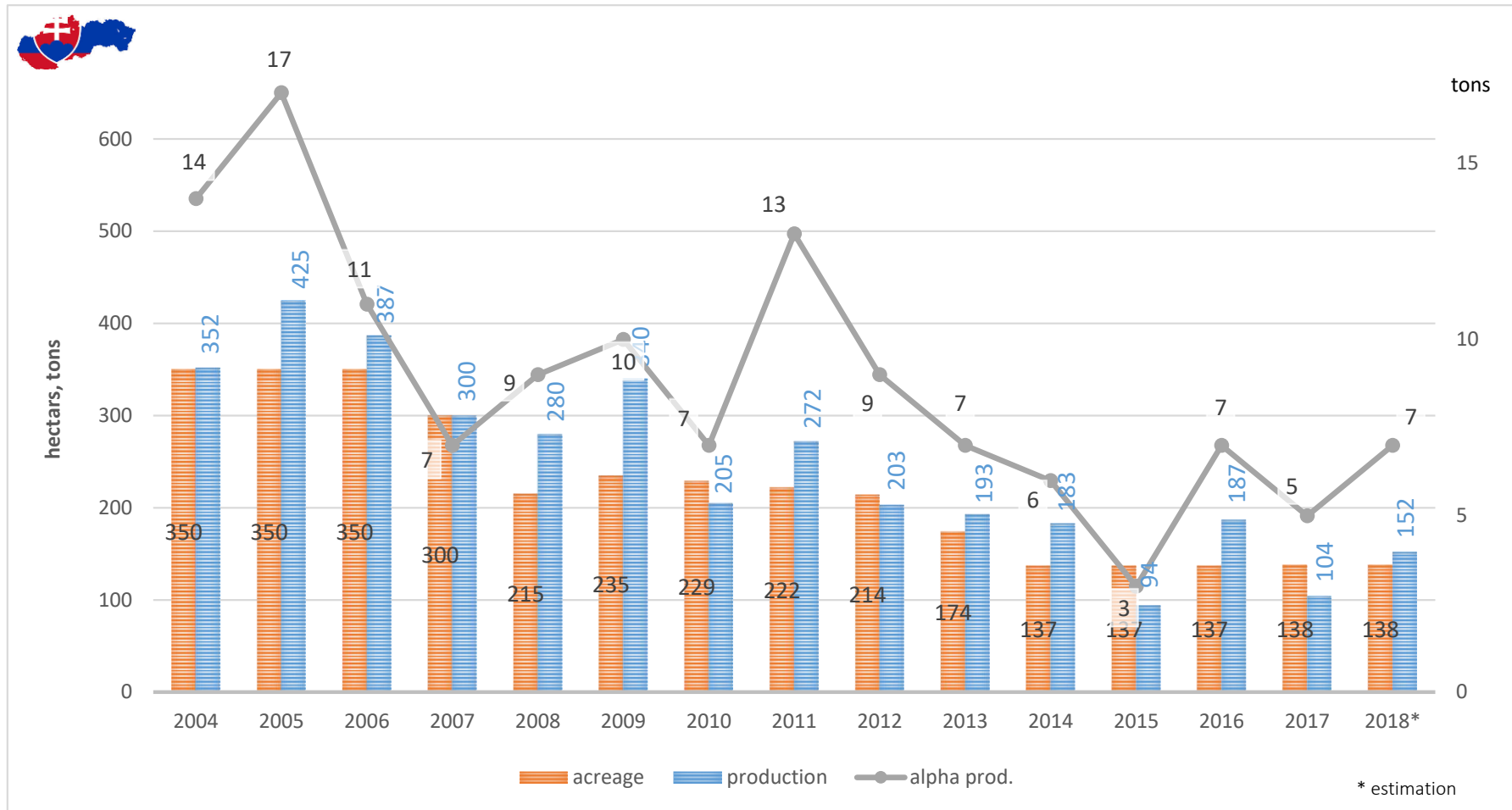


Figure 13: Slovenia hop crops 2004 - 2018*

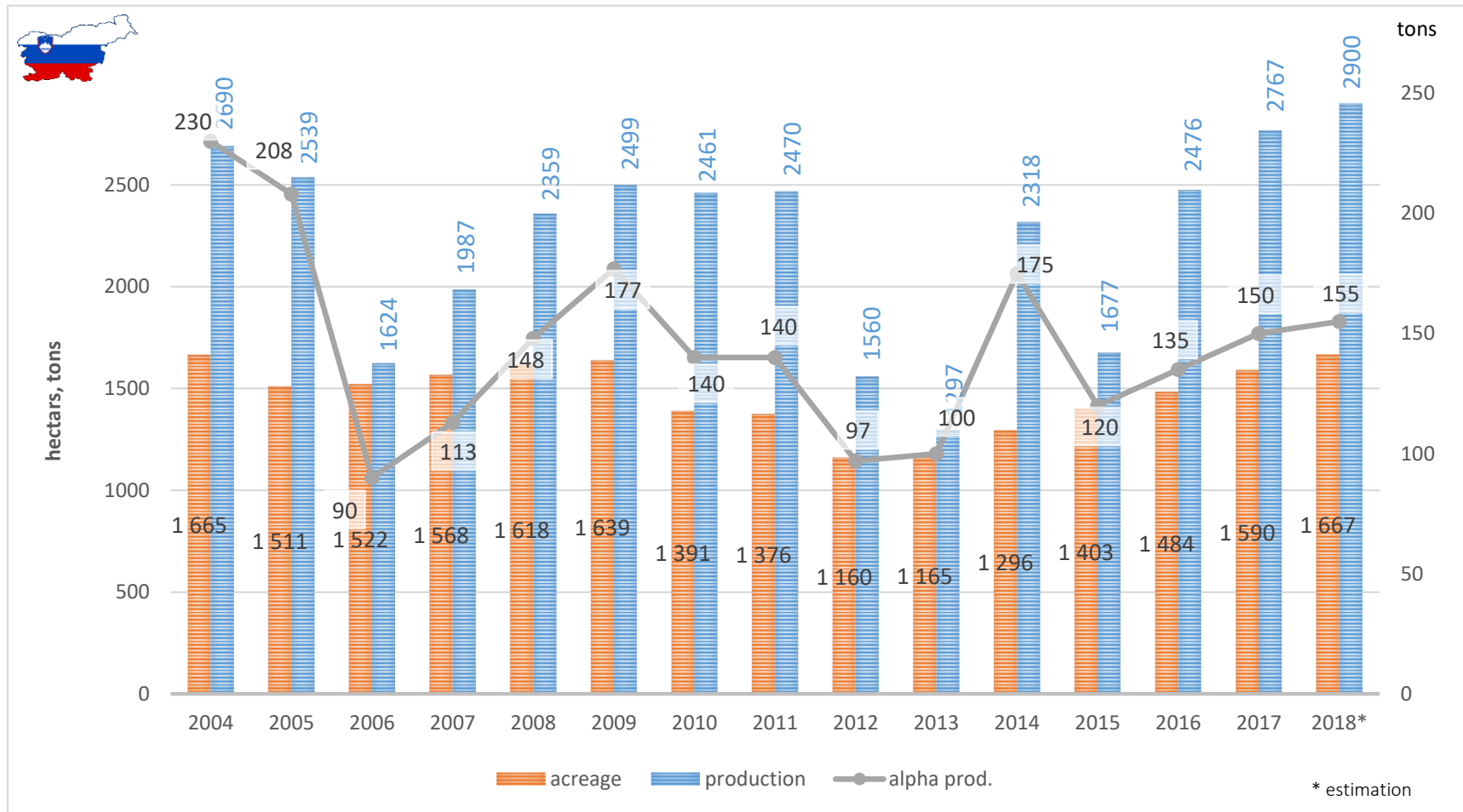


Figure 14: South Africa hop crops 2004 - 2018*

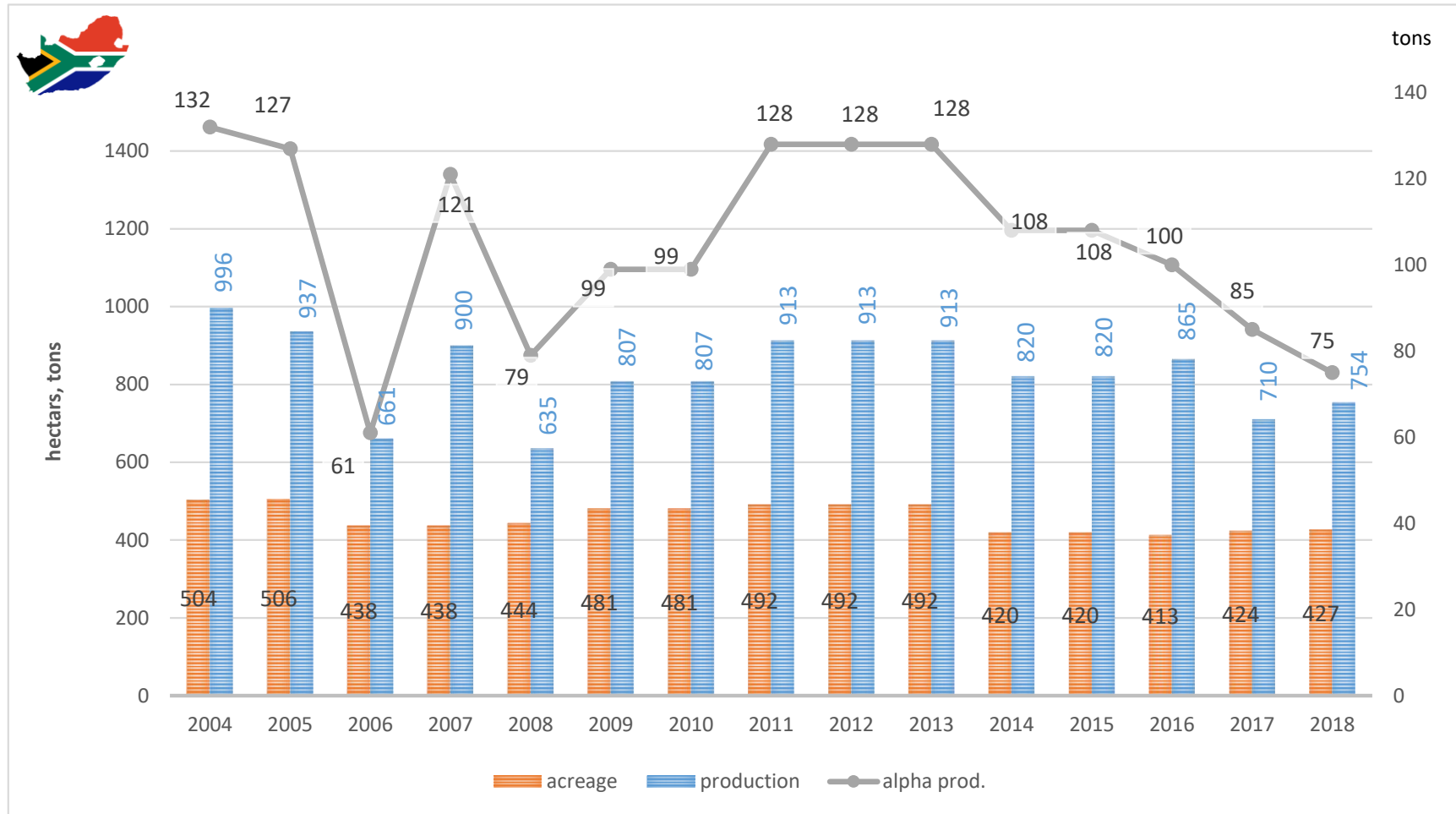


Figure 15: Spain hop crops 2004 - 2018*

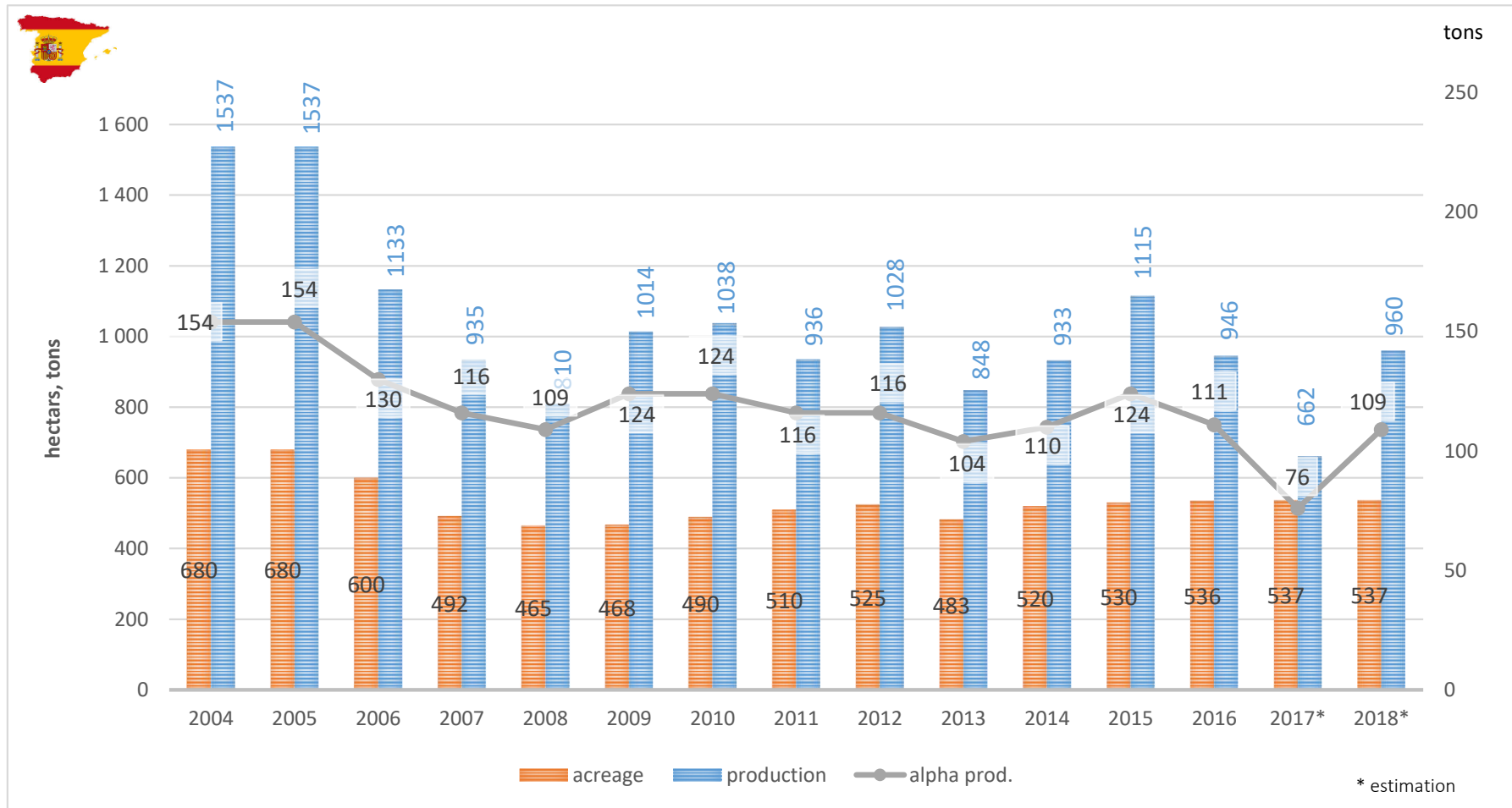


Figure 16: UK-England hop crops 2004 - 2018*

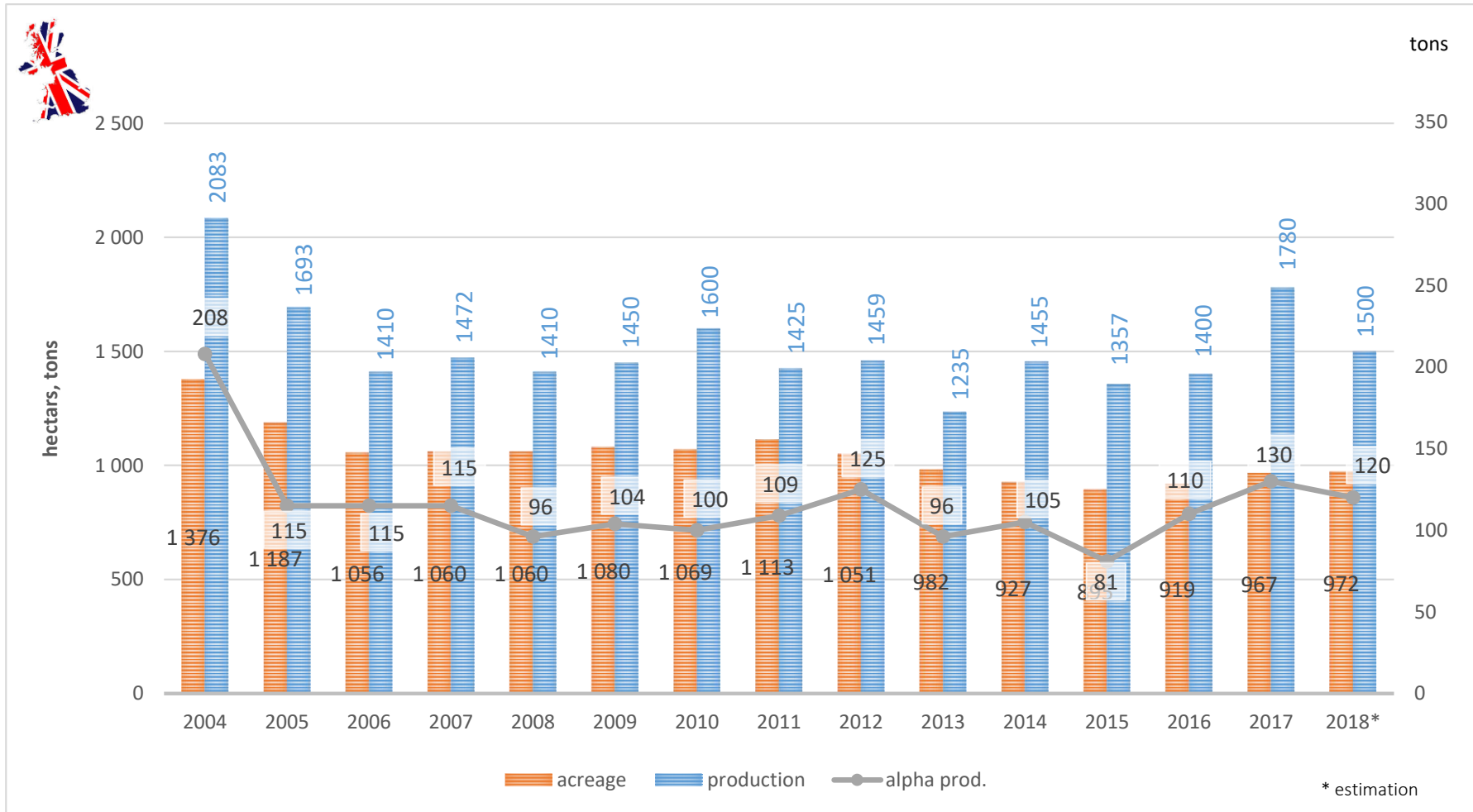


Figure 17: USA hop crops 2004 - 2018*

