



BarthHaas®

REPORT

2024/2025





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FOREWORD

Like almost every sector today, the hop and beer industries are going through a period of radical change. Global crises, volatile markets, trade wars, and changes in consumer behavior are presenting major challenges for hop producers, marketers, and brewers in equal measure. Extreme weather events are increasingly affecting hop harvests. Production costs are rising and beer sales are falling short of expectations in many markets. This directly affects all the links in the value chain – from the farm right through to the brewhouse.

We at BarthHaas see not only the difficulties but also, above all, the opportunities that this transformation presents. We regard it as our responsibility to develop innovative solutions that will help our partners to remain successful even in demanding times. We provide support wherever it is needed – be it in advising growers on how

to achieve sustainable market rebalancing as quickly as possible taking changing conditions into consideration, or in creating cost-effective, tailored product solutions for the beverage industry. Our Group's global orientation is and remains a clear advantage that opens up options for us again and again when it comes to procurement and sales.

Our goal remains to maintain the variety and quality of hops, while at the same time future-proofing the brewing industry. With commitment, experience, and innovative strength, we show the potential that hops contain, thus creating added value for our partners – today and tomorrow.

We would like to thank all those who are taking this path with us, and we look forward to working with them toward a stable, successful, and sustainable future for the hop and beverage industries.

Thomas Raiser Oliver Bergner



BarthHaas Managing Directors Thomas Raiser (left) and Oliver Bergner (right)



WORLD POLITICS

Reporting period: June 2024 to May 2025

The global political situation is characterized by deepening uncertainty, growing geopolitical tensions, and a fragmented international order. International law is being increasingly called into question through non-observance. Several conflicts and trouble spots are significantly influencing the global security situation.

Middle East

The war in the Gaza Strip between **Israel** and the Islamist organization **Hamas** continues unabated. A ceasefire agreement came into force on January 19, 2025. Palestinian prisoners were released from Israeli prisons in exchange for some of the hostages taken by Hamas at the beginning of the conflict, and by early February Israeli troops had withdrawn from occupied areas. On March 18, 2025, Israel ended the ceasefire with massive airstrikes. In May 2025, the Israeli security cabinet approved full military occupation of the entire Gaza Strip. The humanitarian situation is catastrophic. Israel is largely blocking the delivery of relief supplies.

In November 2024, the International Criminal Court (ICC) issued arrest warrants against Israel's prime minister Benjamin Netanyahu, the former defense minister Yoav Gallant, and the leader of the Islamist Hamas, Mohammed Diab Ibrahim al-Masri, for alleged war crimes.

In the **Israeli-occupied West Bank** and East Jerusalem there are approximately 700,000 Jewish settlers living among 2.7 million Palestinians. Most states consider Israel's settlements in the occupied territories to be illegal. In January 2025, the Israeli armed forces conducted a large-scale military operation in the West Bank ostensibly directed against militant groups. Tens of thousands of Palestinians were forced to leave their homes while dwellings and infrastructure were destroyed.

Israel carried out targeted airstrikes on suspected Hezbollah facilities in **Lebanon** following missile attacks originating in that country. Israeli ground troops were also deployed. Israel's operations were designed to weaken Hezbollah's military infrastructure. The Hezbollah militia's attacks are in support of the Islamist Hamas in the war-torn Gaza Strip. A ceasefire agreement was negotiated in November 2024. The agreement included the withdrawal of Israeli troops from the neighboring country in February 2025, which Israel failed to implement, however. Fighting flared up again in March 2025.

In September 2024, **Israel** bombarded targets belonging to the pro-Iranian Houthi militia in **Yemen**. Israel struck

Houthi positions in Yemen once again in May 2025 in response to a missile attack on Israeli soil.

Relations between **Israel** and **Iran** are at a critical point. While military confrontations are increasing, diplomatic efforts are being made at the same time to prevent further escalation.

War in Eastern Europe

The war in Ukraine is increasingly developing into static warfare with only limited territorial shifts. In August 2024, Ukrainian troops launched an offensive into the Russian border region. Ukraine was still in control of small areas in the regions of Kursk and Belgorod at the end of May 2025. The conflict in Ukraine as a whole is characterized by intensive fighting, strategic airstrikes, and complex international dynamics. The first direct negotiations between Russia and Ukraine since the war began three years ago took place on May 16, 2025. There is no immediate prospect of a peace treaty.

Other wars/conflicts

In **Syria**, the Islamist rebel alliance Hayat Tahrir al-Sham (HTS) began a large-scale offensive in December 2024 and within a short time had taken several cities, leading to the fall of the Assad regime. The leader Ahmed al-Sharaa was officially appointed as interim president. The Kurdish-led Syrian Democratic Forces (SDF) and the new Syrian government reached an agreement to fully integrate the former into state institutions.

Israel deployed troops to a UN-supervised buffer zone in the contested Golan Heights to protect its security interests and carried out airstrikes to destroy weapons depots.

According to aid organizations, the power struggle that has been going on in **Sudan** between government forces and the Rapid Support Forces (RSF) militia since April 2023 has led to the world's greatest humanitarian crisis. Both sides are perpetrating executions and violent abductions of defenseless civilians. The motives are ethnic expulsion and sexual violence. According to the UN, 12 million people have been made refugees. The country is in the grip of the most severe famine for 20 years.

The following countries and regions are also considered trouble spots: **Myanmar**, **Yemen**, **Democratic Republic of the Congo**, **Somalia**, **Ethiopia**, **Haiti**, **Venezuela**, the **Sahel region** and **Kashmir**.



WORLD POLITICS

Elections/government coalitions

Presidential and parliamentary elections took place in **Mexico** on June 2, 2024. On October 1, 2024, the left-wing politician **Claudia Sheinbaum** was sworn in as the country's first female president.

In **India**, the Hindu nationalist **Narendra Modi** was elected prime minister for the third time in succession in June 2024.

South Africa is led by a government of national unity (GNU). The GNU is a ten-party coalition. **Cyrill Ramaphosa** was re-elected president of the African National Congress (ANC) in June 2024.

Elections to the **European parliament** took place from June 6 to 9, 2024. The EUROPEAN UNION section (page 8) contains a report on the results.

In the general election in the **United Kingdom** on July 4, 2024, the Labour Party won an absolute majority. **Keir Starmer** became the new British prime minister.

Following the removal of **Srettha Thavisin** as head of the government of Thailand by the country's constitutional court, **Paetongtarn Shinawatra**, the leader of the governing Pheu Thai party, was elected as the new prime minister on August 16, 2024.

The early parliamentary election in **France** in June left none of the parties with an absolute majority. On September 5, 2024, President **Emmanuel Macron** appointed the former EU commissioner **Michel Barnier** as prime minister. The opposition ousted the center-right government and Prime Minister Barnier by a vote of no confidence in December 2024. On December 13, 2024, Macron appointed **François Bayrou**, a centrist politician and leader of the Mouvement Démocrate (MoDem) party, as his new prime minister.

The **Japanese** parliament elected the Liberal Democrat **Shigeru Ishiba** as prime minister on October 1, 2024. In a snap parliamentary election on October 27, the Liberal Democratic Party (LDP) lost its majority in **Japan**'s lower house. Nevertheless, Ishiba was confirmed as prime minister by parliament on November 11, 2024 and has since led a minority government.

Presidential and congressional elections were held in the **USA** on November 5, 2024. The Republican candidate **Donald Trump** won the election. In the congressional election, the Republicans also secured the majority in the Senate and retained control of the House of Representatives.

In the **Federal Republic of Germany** the general election was brought forward for an early election on February 23, 2025 after the government comprising the SPD, Alliance 90/The Greens, and the FDP had collapsed. The election result

failed to produce an absolute majority. The Union parties (CDU and CSU) and the SPD agreed to form a coalition. **Friedrich Merz** (CDU) was elected as Federal Chancellor on May 6, 2025.

In **Canada**, Prime Minister **Justin Trudeau** resigned in March 2025 after more than nine years in office. **Mark Carney** took over as leader of the Liberal Party and became the new prime minister. In the Canadian general election on April 28, 2025, the Liberal Party won the most votes, but fell short of an absolute majority.

On April 4, 2025, **Yoon Suk Yeol** was removed from office as President of **South Korea** following his unsuccessful attempt to declare martial law in December 2024. Education Minister Lee Ju-ho is acting as interim president until a new president is elected on June 3, 2025.

USA

Since Donald Trump's return to office in January 2025, there have been considerable political changes in the USA. Immediately after being sworn in, President Trump issued numerous decrees, initiating a radical turnaround in domestic and foreign policy.

North Atlantic Treaty Organization (NATO)

Mark Rutte of the Netherlands took office as secretary general of NATO, the military alliance of European and North American member states, in October 2024. He succeeds **Jens Stoltenberg** who held the position for approximately ten years.

Paris Climate Agreement

At the World Climate Conference in Paris on December 12, 2015, 195 states committed themselves to curbing climate change and making the world economy climate-friendly. In January 2025, US President Donald Trump signed an executive order withdrawing the US from the Agreement.

Head of the Roman Catholic Church

After twelve years in office, Pope **Francis** died on April 21, 2025. On May 8, 2025, the conclave in Rome elected Robert F. Prevost of the United States as his successor. He chose **Leo XIV** as his papal name.



WORLD ECONOMY

Reporting period: June 2024 to May 2025

The development of the global economy in 2024 was moderate, but displayed resilience. **Gross domestic product (GDP)** grew by 3.3%, following a rise of 3.5% in 2023. Growth in the **USA** remained stable at 2.8% (2023: 2.9%). The economy in **China** slowed to 5.0% (2023: 5.4%). In **Germany**, too, there was little change, with negative growth of -0.2% (2023: -0.1%).

US tariff policy

In April 2025 the US government under President Trump imposed punitive tariffs on almost every country with a trade deficit with the USA. In some cases, these tariffs were then suspended for 90 days to allow time for negotiations.

A genuine trade war broke out when China responded with punitive tariffs of its own in return. In addition, both sides imposed export controls and sanctions measures, which further aggravated the tensions. A diplomatic breakthrough was achieved on May 12, 2025. The USA reduced their tariffs from 145% to 30%, while China lowered its counter-tariffs from 125% to 10%. These measures are to apply initially for 90 days to allow time for further negotiations.

Interest rates

The most important central banks raised interest rates sharply in 2022 and 2023 in order to bring the rampant inflation caused by the Covid crisis and the Ukraine war under control. In the meantime, the battle against high inflation appears to have been won. The major central banks have begun to reduce interest rates again.

In June 2024, the **European Central Bank (ECB)** began lowering interest rates after inflation had fallen significantly in the euro zone. It cut its base rate in seven stages from 4.5% to 2.4%, with the last cut in April 2025.

The **US Federal Reserve (Fed)** adopted a more cautious interest rate policy. It lowered the target range for federal funds from 5.25 – 5.50% to 4.25 – 4.50% in three steps, the last of them in December 2024.

Currencies

The **euro / US dollar** exchange rate fluctuated widely under the influence of monetary policy decisions, economic developments, and geopolitical events. During the reporting period, the exchange rate reached a peak of 1.1514 USD on April 21, 2025, having reached its lowest level of 1.0242 USD on January 10, 2025.

Stock market

The highest closing value for the **Dow Jones Index (DJIA)** during the reporting period was 45,018 points on December 4, 2024. It reached its lowest level on April 8, 2025, closing at 37,027 points. The **German share index (DAX)** passed the 24,000-point mark for the first time in May 2025. Its lowest closing value during the reporting period was 17,423 points recorded on August 5, 2024. The two indices reflected the challenges and uncertainties facing a global economy influenced by the aggressive trade policy of the USA and were subject both to sharp rises and to significant falls.

Oil price

The fluctuations in the **oil price** reflect the uncertainties in global energy markets, with geopolitical tensions, economic developments, and decisions of the oil-producing countries constituting the principal influencing factors.

The price of a barrel (159 liters) of North Sea Brent crude oil on July 4, 2024 was 87.58 USD, the highest price during the reporting period. The lowest price of 60.27 USD was recorded on May 5, 2024.

BRICS states

The BRICS states, a grouping of important emerging economies formed for the purpose of increasing economic cooperation and political influence and playing a stronger role in the Global South, admitted **Indonesia** as its tenth full member in January 2025.

CURRENCY EXCHANGE RATES

1 EUR EQUALS (REFERENCE BY ECB):

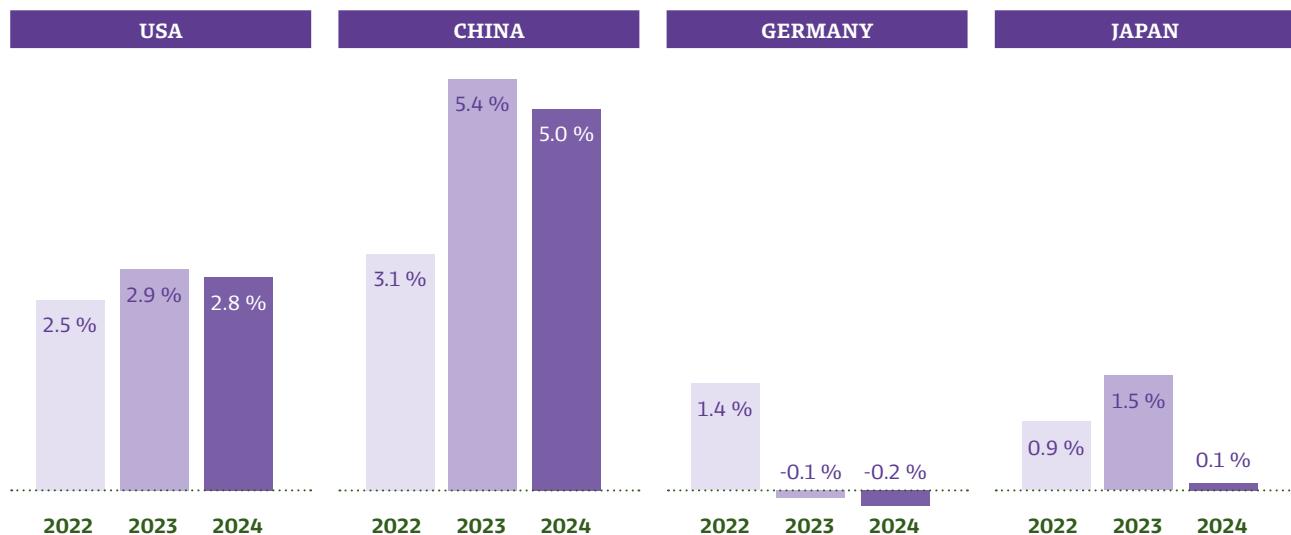
| | on May 30, 2024 | on May 30, 2025 | | on May 30, 2024 | on May 30, 2025 |
|-----------------------|-----------------|-----------------|-----------------------|-----------------|-----------------|
| Australia | 1.6341 AUD | 1.7647 AUD | Poland | 4.2848 PLN | 4.2498 PLN |
| China | 7.8261 CNY | 8.1576 CNY | Switzerland | 0.9808 CHF | 0.9341 CHF |
| United Kingdom | 0.85105 GBP | 0.84120 GBP | South Africa | 20.1501 ZAR | 20.2939 ZAR |
| Japan | 169.50 JPY | 162.96 JPY | Czech Republic | 24.770 CZK | 24.918 CZK |
| Canada | 1.4828 CAD | 1.5656 CAD | USA | 1.0815 USD | 1.1339 USD |

These exchange rates can only serve as an indication. They vary from bank to bank and are not binding.



KEY DATA

GDP growth (real)



| | | Balance of payments in USD bn | Balance of trade in USD bn | Inflation rate Ø* in % | Interest rate Ø* in % | Unemployment (as of 31.12.) in % |
|---------|------|-------------------------------|----------------------------|------------------------|-----------------------|----------------------------------|
| USA | 2022 | | -1,012.1 | | 2.95 | |
| | 2023 | | -905.4 | | 3.96 | |
| | 2024 | | -1,133.6 | | 4.21 | |
| China | 2022 | 443.4 | 665.0 | 2.0 | 2.76 | 4.6 |
| | 2023 | 253.0 | 593.9 | 0.2 | 2.71 | 4.1 |
| | 2024 | 421.9 | 767.9 | 0.2 | 2.18 | 4.3 |
| Germany | 2022 | 184.8 | 142.3 | 8.7 | 1.17 | 5.4 |
| | 2023 | 262.6 | 243.8 | 6.0 | 2.48 | 5.7 |
| | 2024 | 300.4 | 271.4 | 2.5 | 2.37 | 6.0 |
| Japan | 2022 | 90.2 | -115.8 | 2.5 | 0.23 | 2.6 |
| | 2023 | 159.2 | -47.9 | 3.3 | 0.56 | 2.6 |
| | 2024 | 193.4 | -25.8 | 2.7 | 0.92 | 2.5 |

The figures for 2022 and 2023 have been revised according to the latest statistics and subsequent recalculations.

* Interest rate for 10-year bonds.



EUROPEAN UNION

Reporting period: June 2024 to May 2025

2024 European election

Voting in the European election took place in the 27 EU member states from June 6 to 9, 2024. The European People's Party (EPP) remained the largest party group. As before, the second largest group is the Progressive Alliance of Socialists and Democrats (S&D). The Liberal group Renew Europe and the Greens/European Free Alliance (Greens/EFA) both suffered heavy losses. Right-wing parties were able to make gains. The newly elected parliament was constituted on July 16, 2024. The Maltese Conservative **Roberta Metsola** was re-elected as **President of the European Parliament**. The German Christian Democrat **Ursula von der Leyen** was also re-elected as **President of the European Commission**. On November 27, 2024, the newly elected parliament appointed 26 new commissioners. The EU Commission is the only institution in the EU that can propose legislation for the community of EU states and oversee compliance with EU law.

Accession to the European Union

The EU officially opened accession talks with **Ukraine** and the **Republic of Moldova** in June 2024. The process, the outcome of which is uncertain, may go on for years.

In a referendum in October 2024, the citizens of the **Republic of Moldova** voted in favor of incorporating the goal of EU accession in their constitution.

In May 2024, the parliament of **Georgia** passed a new law to more strictly control civil society that severely tightened the accountability requirements of non-governmental organizations which receive more than 20 percent of their funding from abroad. The EU demanded on several occasions that this law be revoked. As this did not happen, the EU suspended the accession process with Georgia which had only been granted accession candidate status by the EU in December 2023.

Security agreement with Ukraine

In June 2024, the EU and **Ukraine** finalized an agreement on security cooperation and long-term support. The agreement includes political, financial, economic, humanitarian, military, and diplomatic support from the EU and a crisis mechanism in the event of a nuclear attack by Russia.

Violations of the rule of law

Hungary disregards various EU standards and fundamental values. For this reason, EU funds have been frozen. In order to receive payment of 1.04bn euros from programs to support economically underdeveloped regions, Hungary had been given until the end of 2024 to implement required reforms. These included changes to laws for the prevention of conflicts of interest and for combating corruption. As this

was not done, the funds were cancelled. Some 19bn euros of EU funds due to Hungary are blocked, including further subsidies and Covid-related financial aid.

Trade conflict with USA

In April 2025, US President Donald Trump announced new punitive tariffs of up to 25 % on European products. Shortly afterwards, implementation was suspended for 90 days. The EU responded with counter-tariffs of between 10 % and 25 % on certain US products. It also imposed high fines on US tech companies. Despite these tensions, both sides remained open to talks. The EU also suspended its countermeasures to clear the way for negotiations.

Common Agricultural Policy (CAP)

A reform of the Common Agricultural Policy (CAP) for the period 2023–2027 was needed for the second half of 2024 after both farmers and member states had emphatically pointed out a number of difficulties in implementation in the first year 2023.

The European Commission has been working intensively since the beginning of 2025 to amend and clarify several policy regulations with the aim of reducing the administrative workload for farmers and the national authorities. Having listened closely to the reservations expressed by the farmers and the EU member states, the Commission responded purposefully to take specific, fast-acting measures.

With the new implementation model, the CAP is to change from a model focused on compliance with regulations to one focused on performance. The aims in terms of political orientation remain those specified by the Green Deal, but the achievement of results is to be defined to a greater extent with due regard to country-specific needs. The EU member states are to play a key part in this when it comes to limiting the administrative workload and keeping it in proportion. The new proposals are aimed at reducing the burden of monitoring for the farmers and allowing the member states greater flexibility in complying with environmental regulations.

Implications for hops as a specialty crop

Crop year 2024 was the first in which the new EU regulations (implementing regulations (EU) 2024/601 and (EU) 2023/2835 of December 14, 2023) for the certification of hops and hop products came into effect and were implemented by the hop-producing member states. Efforts are still being made to digitalize and thus simplify the path of the accompanying certificates from the first certification of the cone hops to the second certification of hop products.

EUROPEAN UNION

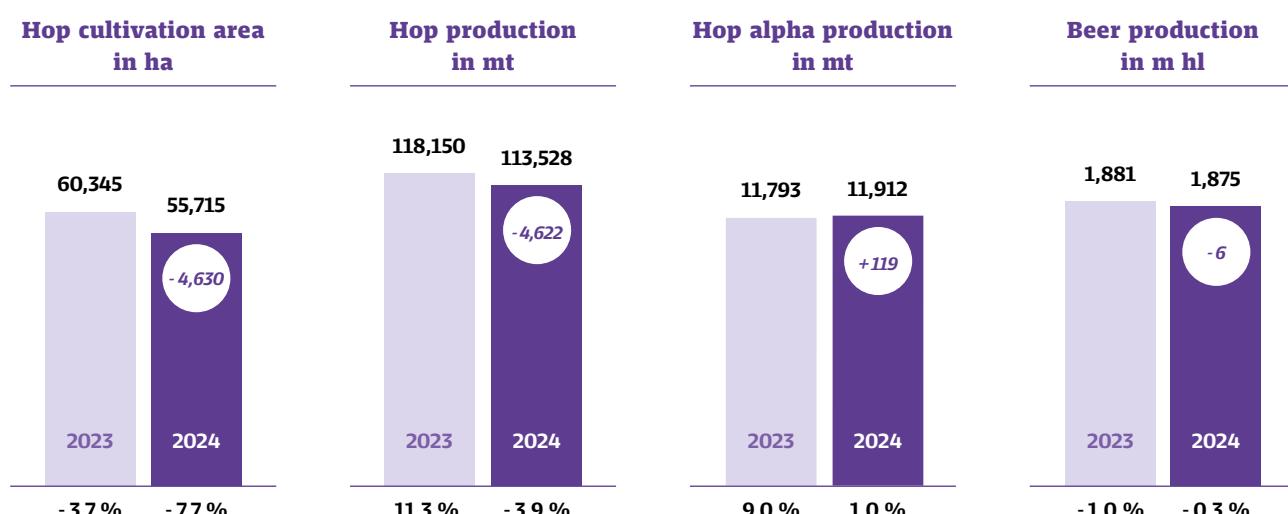
In January 2025, the EU Commission announced a proposal to amend Regulation (EU) 1308/2023 on the common market organization for agricultural produce with the aim of strengthening the position of the farmers in the food supply chain. One criticism of this proposal, among others, referred to the requirement that contracts be concluded in written form, which would rule out a modern digital contract process. The hop industry in particular has been working with internet portals and digital contracts for some years now. A return to the written form would be a retrograde step and would require several industries to adjust. A further proposed amendment is that contracts with a term of more than six months should contain a revision clause to enable farmers, producers' organizations, or associations of producers' organizations to request an amendment of the contract, especially in cases in which the price no longer covers the costs of production, and to terminate the contract in the event of such a request being rejected. The contractual practice that has been established in the hop industry for decades could be seriously affected by the proposed amendment. It would limit planning security for agricultural production and increase the risk of market volatility and price fluctuations for all contracting parties, as buyers could no longer rely on long-term contracts. The entire hop industry has come out against this proposed amendment, as it would fundamentally destabilize the existing contract system.

The system of granting EU hop subsidies to the two German producers' organizations continues to be implemented at national level by the Federal Agency for Agriculture and Food. The necessary preconditions for this have been met. The use of these subsidies is tied to

certain programs in accordance with the CAP strategy plan. Established practices in the German hop industry such as impartial quality assessment, which in the past was funded out of the hop subsidy payments, but now no longer meets the requirements of the CAP guidelines, are in urgent need of reform. The funding gaps resulting from the reduction in subsidy payments have to be filled by the hop growers and the hop industry at short notice, which significantly adds to their costs. On the other hand, there are now more subsidies available for measures to increase biodiversity in hop farming, but no suitable measures have yet been drawn up.



WORLD MARKET DATA





WORLD ACREAGE AND CROP 2023/2024

| | | 2023 | | | | 2024 | | | |
|------------------------------|-------------------|---------------|------------------|---------------|---------------|---------------|------------------|---------------|---------------|
| | | Acreage ha | Production mt | Ø-Alpha % | Alpha mt | Acreage ha | Production mt | Ø-Alpha % | Alpha mt |
| Germany | Hallertau | 17,129 | 34,949 | 9.7 % | 3,374 | 16,815 | 40,302 | 11.2 % | 4,522 |
| | Elbe-Saale | 1,563 | 3,056 | 10.7 % | 326 | 1,532 | 2,569 | 10.3 % | 265 |
| | Tettnang | 1,517 | 2,533 | 7.4 % | 187 | 1,528 | 2,908 | 8.3 % | 242 |
| | Spalt | 403 | 672 | 6.3 % | 42 | 396 | 717 | 6.7 % | 48 |
| | Other | 18 | 23 | 9.1 % | 2 | 17 | 40 | 9.5 % | 4 |
| | Total | 20,629 | 41,234 | 9.5 % | 3,932 | 20,289 | 46,536 | 10.9 % | 5,081 |
| Czech Republic | Saaz | 3,744 | 5,268 | 3.6 % | 188 | 3,713 | 5,086 | 3.7 % | 187 |
| | Tirschitz | 616 | 845 | 3.1 % | 27 | 634 | 712 | 3.0 % | 22 |
| | Auscha | 500 | 885 | 4.0 % | 35 | 498 | 696 | 4.6 % | 32 |
| | Total | 4,860 | 6,997 | 3.6 % | 249 | 4,845 | 6,494 | 3.7 % | 241 |
| Slovenia | | 1,676 | 2,735 | 6.9 % | 189 | 1,644 | 2,273 | 5.4 % | 122 |
| Poland | | 1,652 | 3,505 | 9.2 % | 321 | 1,571 | 2,953 | 8.9 % | 264 |
| France | | 726 | 940 | 4.9 % | 46 | 723 | 1,058 | 5.1 % | 53 |
| Spain (incl. Galicia) | | 580 | 851 | 10.8 % | 92 | 607 | 1,017 | 11.1 % | 113 |
| Romania | | 275 | 255 | 9.3 % | 24 | 275 | 201 | 9.3 % | 19 |
| Austria | | 269 | 381 | 7.0 % | 27 | 272 | 333 | 7.1 % | 24 |
| Belgium | | 185 | 309 | 9.0 % | 28 | 177 | 266 | 8.8 % | 23 |
| Bulgaria | | 33 | 60 | 10.1 % | 6 | 42 | 56 | 9.2 % | 5 |
| Slovakia | | 38 | 20 | 3.1 % | 1 | 38 | 45 | 3.0 % | 1 |
| Italy | | 20 | 20 | 5.8 % | 1 | 20 | 25 | 6.0 % | 1 |
| Portugal | | 12 | 10 | 10.0 % | 1 | 12 | 14 | 9.0 % | 1 |
| Netherlands | | 5 | 2 | 12.2 % | 0 | 4 | 1 | 10.5 % | 0 |
| European Union | | 30,960 | 57,319 | 8.6 % | 4,917 | 30,519 | 61,274 | 9.7 % | 5,949 |
| England | | 561 | 780 | 7.7 % | 60 | 542 | 695 | 7.6 % | 53 |
| Russia* | | 300 | 360 | 4.7 % | 17 | 350 | 400 | 4.7 % | 19 |
| Ukraine* | | 130 | 160 | 4.9 % | 8 | 100 | 120 | 4.8 % | 6 |
| Turkey | | 128 | 102 | 9.7 % | 10 | 94 | 67 | 11.3 % | 7 |
| Belarus | | 62 | 83 | 8.5 % | 7 | 62 | 83 | 8.4 % | 7 |
| Switzerland | | 17 | 28 | 8.5 % | 2 | 17 | 26 | 9.1 % | 2 |
| Serbia | | 10 | 11 | 9.4 % | 1 | 14 | 24 | 10.1 % | 2 |
| Rest of Europe | | 1,208 | 1,525 | 6.9 % | 105 | 1,179 | 1,415 | 6.8 % | 97 |
| EUROPE | | 32,168 | 58,843 | 8.5 % | 5,022 | 31,697 | 62,688 | 9.6 % | 6,045 |
| USA | Washington | 15,723 | 34,727 | 12.1 % | 4,218 | 13,501 | 29,091 | 12.5 % | 3,635 |
| | Idaho | 3,499 | 7,644 | 11.4 % | 874 | 2,346 | 5,978 | 11.7 % | 700 |
| | Oregon | 2,761 | 4,822 | 10.3 % | 496 | 2,280 | 4,427 | 11.0 % | 488 |
| | PNW-States | 21,982 | 47,193 | 11.8 % | 5,588 | 18,127 | 39,496 | 12.2 % | 4,823 |
| | Other States | 563 | 408 | 8.6 % | 35 | 386 | 499 | 8.6 % | 43 |
| | Total | 22,545 | 47,601 | 11.8 % | 5,623 | 18,513 | 39,995 | 12.2 % | 4,866 |
| Argentina | | 205 | 303 | 10.1 % | 31 | 213 | 287 | 9.8 % | 28 |
| Canada* | | 206 | 160 | 9.1 % | 15 | 200 | 157 | 9.1 % | 14 |
| AMERICA | | 22,956 | 48,064 | 11.8 % | 5,669 | 18,926 | 40,439 | 12.1 % | 4,909 |
| China | | 2,601 | 6,580 | 7.2 % | 475 | 2,720 | 6,325 | 7.2 % | 457 |
| Japan | | 78 | 123 | 5.2 % | 6 | 75 | 127 | 4.8 % | 6 |
| ASIA | | 2,679 | 6,703 | 7.2 % | 481 | 2,795 | 6,452 | 7.2 % | 463 |
| South Africa | | 408 | 740 | 13.6 % | 101 | 404 | 682 | 11.6 % | 79 |
| AFRICA | | 408 | 740 | 13.6 % | 101 | 404 | 682 | 11.6 % | 79 |
| New Zealand* | | 1,184 | 1,835 | 9.0 % | 165 | 1,135 | 1,760 | 9.0 % | 159 |
| Australia | | 951 | 1,965 | 18.1 % | 356 | 758 | 1,508 | 17.0 % | 257 |
| AUSTRALIA/OCEANIA | | 2,135 | 3,800 | 13.7 % | 521 | 1,893 | 3,268 | 12.7 % | 416 |
| WORLD | | 60,345 | 118,150 | 10.0 % | 11,793 | 55,715 | 113,528 | 10.5 % | 11,912 |

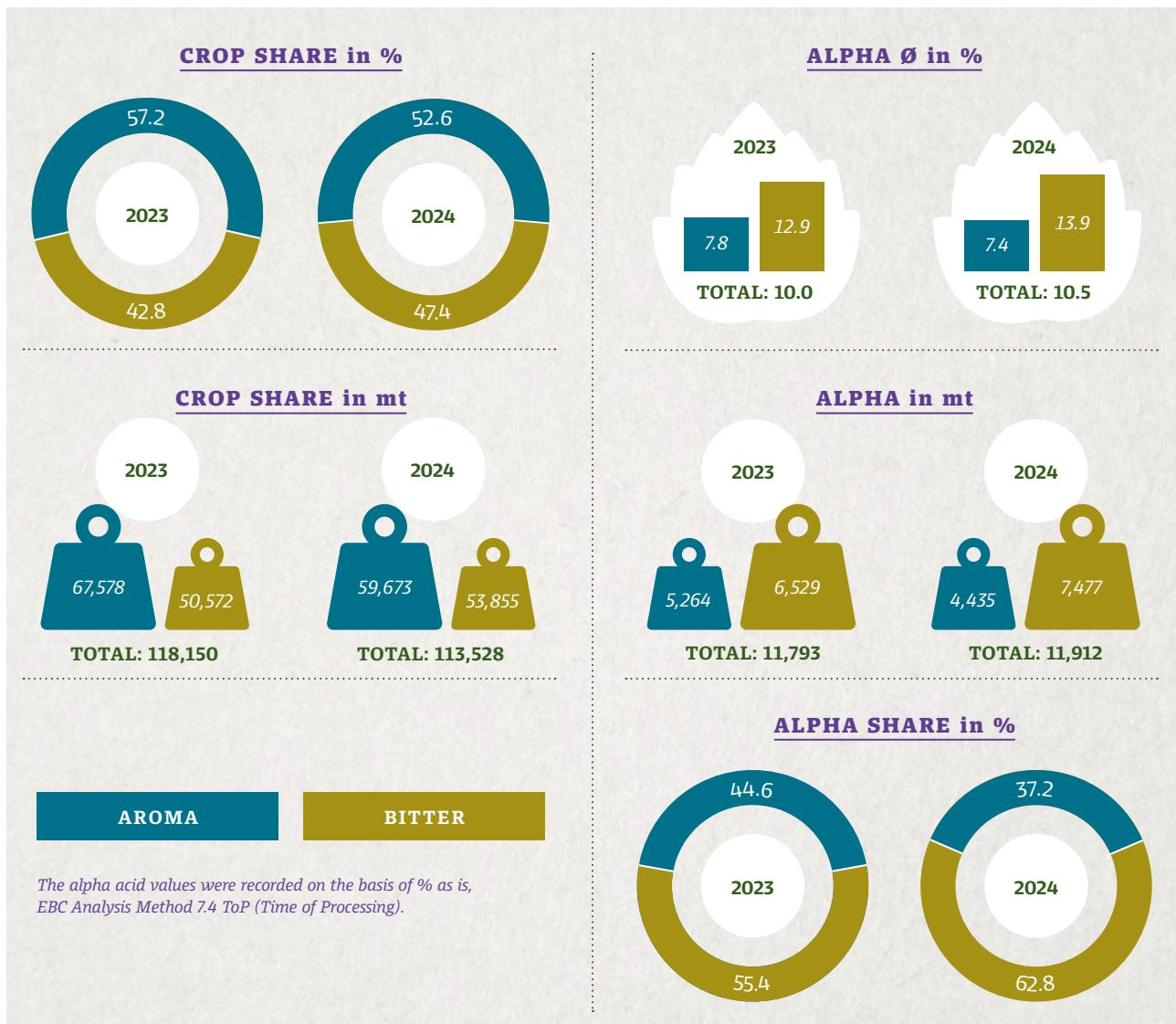
* Estimate Italics: Corrections for 2023 as stated in last year's report.

Due to the rounding of some figures, there may be differences in the sum totals in certain cases.



ALPHA ACID PRODUCTION

The world hop crop, divided according to variety groups, produced the following alpha acid volume:



The decline of nearly 8 % (-4,630 ha) in world hop acreage and the increase of 4 % in yield per hectare (2023: 1.96 mt / 2024: 2.04 mt) together produced a crop volume that was 4 % lower (-4,622 mt) year on year. Average alpha acid content increased from 10.0 % to 10.5 %, resulting in a year-on-year increase in alpha yield of 1 % (+119 mt).

The proportion of aroma hops in both crop and alpha yield fell, while that of bitter hops increased accordingly.

Germany and the USA accounted for 43 % (2023: 33 %) and 41 % (2023: 48 %), respectively, of alpha production volume worldwide. The combined share of the two countries amounts to 84 % (2023: 81 %). In the aroma category, the USA saw its share fall to 57 % (2023: 60 %), while Germany's rose to 21 % (2023: 17 %). Germany's share of alpha volume from bitter varieties was 56 % (2023: 46 %), with the USA accounting for 31 % (2023: 38 %).

The working group "Arbeitsgruppe Hopfenanalyse" (AHA) publishes the average alpha acid values measured in freshly harvested hops. The members of AHA are the in-house laboratories of the German processing plants Hallertauer Hopfenveredelungsgesellschaft Mainburg and Hopfenveredelung St. Johann, HVG Mainburg, LfL Hüll, BLQ Weihenstephan, VLB Berlin, Labor Veritas (Zurich), TU Berlin and IHPS Žalec. These values form the basis for any adjustments of supply contracts between the brewing industry and the hop industry containing an "alpha clause". The average values also serve as the basis for parties concluding new supply contracts containing an "alpha clause". The table includes the designation of varieties as aroma hops (A) or bitter hops (B) in accordance with IHGC (International Hop Growers' Convention) classification.



ALPHA ACID PRODUCTION

Alpha acid values of the AHA as is, as per EBC 7.4, in freshly harvested hops

All other alpha acid values mentioned in the BarthHaas Report were recorded on the basis of % as is, EBC 7.4 ToP (Time of Processing).

| Area | Variety | Type | 2023 | 2024 | Ø 5 Years | Ø 10 Years |
|-------------------|-----------------------|----------|------|------|-----------|------------|
| Hallertau | Hallertau Mittelfrueh | A | 2.9 | 3.3 | 3.8 | 3.7 |
| | Hersbruck Spaet | A | 3.0 | 2.5 | 3.1 | 2.7 |
| | Saphir | A | 3.1 | 3.2 | 3.5 | 3.4 |
| | Opal | A | 6.7 | 7.1 | 7.4 | 7.2 |
| | Smaragd | A | 5.4 | 4.5 | 5.5 | 5.2 |
| | Perle | A | 6.0 | 6.2 | 6.7 | 6.5 |
| | Spalt Select | A | 4.7 | 3.9 | 4.7 | 4.4 |
| | Hallertau Tradition | A | 4.9 | 5.3 | 5.6 | 5.5 |
| | Mandarina Bavaria | A | 7.9 | 9.0 | 8.8 | 8.2 |
| | Hallertau Blanc | A | 8.7 | 9.7 | 9.5 | 9.2 |
| | Huell Melon | A | 6.9 | 6.3 | 7.0 | 6.6 |
| | Northern Brewer | A | 7.5 | 8.3 | 8.4 | 8.1 |
| | Polaris | B | 18.0 | 19.8 | 19.7 | 19.5 |
| | Hallertau Magnum | B | 11.8 | 12.9 | 13.4 | 13.1 |
| | Nugget | B | 11.9 | 10.9 | 11.2 | 10.9 |
| | Hallertau Taurus | B | 13.8 | 15.9 | 15.5 | 15.4 |
| | Herkules | B | 13.9 | 15.8 | 16.0 | 15.9 |
| Elbe-Saale | Hallertau Magnum | B | 14.2 | 12.3 | 12.8 | 12.2 |
| Tettnang | Tettnang | A | 2.6 | 3.3 | 3.5 | 3.4 |
| | Hallertau Mittelfrueh | A | 3.3 | 3.8 | 4.0 | 4.0 |
| Spalt | Spalt | A | 3.0 | 3.6 | 3.9 | 3.6 |
| | Spalt Select | A | 5.4 | 4.4 | 4.7 | 4.4 |
| Czech Rep. | Saaz | A | 2.6 | 2.6 | 3.1 | 3.0 |
| | Sládek | A | 6.1 | 6.6 | 6.6 | 6.1 |
| | Premiant | A | 7.0 | 7.3 | 7.7 | 7.4 |
| Poland | Lubelski | A | 3.2 | 2.5 | 3.6 | 3.5 |
| | Marynka | A | 7.8 | 7.6 | 8.0 | 8.0 |
| | Sybilla | A | 5.7 | 5.6 | 6.1 | 5.6 |
| Slovenia | Aurora | A | 9.7 | 7.7 | 8.5 | 8.4 |
| | Savinjski Golding | A | 3.1 | 2.3 | 2.9 | 2.9 |
| | Bobek | A | 5.9 | 3.8 | 4.6 | 4.5 |
| | Celeia | A | 4.1 | 3.1 | 3.4 | 3.3 |

Alpha acid values as is, as per EBC 7.4,
ToP (Time of Processing)

| | | | | | | |
|------------|----------|----------|------|------|------|------|
| USA | Nugget | B | 12.9 | 14.5 | 13.6 | 13.5 |
| | CTZ | B | 14.5 | 14.2 | 15.0 | 15.1 |
| | HBC 682 | B | 17.1 | 15.9 | 17.6 | 17.6 |
| | Eureka!™ | B | 16.7 | 17.6 | 17.5 | - |

Type A = Aroma Type B = Bitter





COUNTRY REPORT: GERMANY

Results for 2023 and 2024 by production region and variety group

HALLERTAU

Acreage ha



Production mt



ELBE-SAALE

Acreage ha



Production mt



TETTNANG

Acreage ha

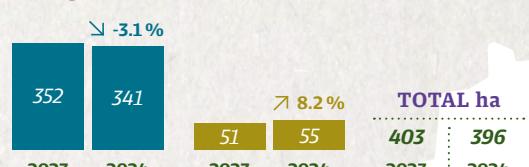


Production mt

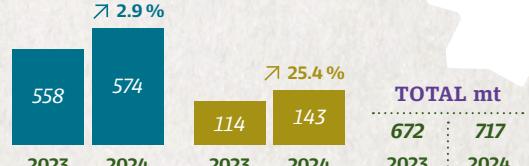


SPALT

Acreage ha

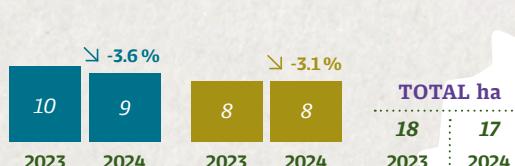


Production mt



OTHER

Acreage ha



Production mt



GERMANY TOTAL

Acreage ha



Production mt



AROMA

BITTER

The rounding of acreage and production figures may sometimes lead to differences in sum totals.



COUNTRY REPORT: GERMANY

Farm structure

In Germany, a further 31 growers have discontinued hop production. The average planted acreage of the remaining 1,009 farms rose to 20.1 ha (+0.3 ha) per farm in crop year 2024. There are 814 farms with an average hop acreage of

20.7 ha in the Hallertau region, 30 farms (51.1 ha) in the Elbe-Saale region, 121 farms (12.6 ha) in Tettnang, 43 farms (9.2 ha) in Spalt, and 1 farm with 17.1 ha in the rest of Germany.

Acreage development over the past five years

| Variety | 2020 ha | 2021 ha | 2022 ha | 2023 ha | 2024 ha | Difference to previous year | Change in % | Percentage of acreage 2024 |
|-----------------------|---------------|---------------|---------------|---------------|---------------|-----------------------------|---------------|----------------------------|
| Perle | 3,297 | 3,331 | 3,354 | 3,235 | 2,861 | -375 | -11.6 % | 14.1 % |
| Hallertau Tradition | 2,870 | 2,844 | 2,786 | 2,702 | 2,461 | -241 | -8.9 % | 12.1 % |
| Hersbruck Spaet | 904 | 821 | 810 | 785 | 775 | -10 | -1.3 % | 3.8 % |
| Tettnang | 718 | 682 | 654 | 646 | 632 | -13 | -2.1 % | 3.1 % |
| Hallertau Mittelfrueh | 671 | 650 | 636 | 615 | 601 | -14 | -2.3 % | 3.0 % |
| Spalt Select | 608 | 558 | 538 | 528 | 499 | -29 | -5.5 % | 2.5 % |
| Saphir | 449 | 395 | 374 | 330 | 292 | -38 | -11.4 % | 1.4 % |
| Northern Brewer | 266 | 255 | 230 | 192 | 175 | -17 | -9.0 % | 0.9 % |
| Mandarina Bavaria | 278 | 230 | 195 | 187 | 160 | -27 | -14.4 % | 0.8 % |
| Saaz | 157 | 162 | 160 | 156 | 154 | -2 | -1.4 % | 0.8 % |
| Opal | 144 | 138 | 135 | 137 | 122 | -15 | -10.8 % | 0.6 % |
| Akoya | 26 | 104 | 122 | 131 | 102 | -28 | -21.6 % | 0.5 % |
| Spalt | 113 | 107 | 106 | 106 | 100 | -6 | -5.3 % | 0.5 % |
| Other Aroma | 834 | 722 | 698 | 624 | 625 | 1 | 0.2 % | 3.1 % |
| Total Aroma | 11,335 | 10,999 | 10,801 | 10,374 | 9,559 | -814 | -7.8 % | 47.1 % |
| Herkules | 6,717 | 6,974 | 7,142 | 7,498 | 7,917 | 419 | 5.6 % | 39.0 % |
| Hallertau Magnum | 1,918 | 1,861 | 1,813 | 1,770 | 1,620 | -150 | -8.5 % | 8.0 % |
| Polaris | 340 | 437 | 494 | 561 | 588 | 27 | 4.9 % | 2.9 % |
| Titan | - | - | - | 94 | 322 | 228 | 243.9 % | 1.6 % |
| Hallertau Taurus | 211 | 169 | 161 | 147 | 116 | -31 | -21.1 % | 0.6 % |
| Other Bitter | 185 | 181 | 194 | 185 | 166 | -21 | -11.4 % | 0.8 % |
| Total Bitter | 9,371 | 9,622 | 9,804 | 10,255 | 10,729 | 474 | 4.6 % | 52.9 % |
| GERMANY TOTAL | 20,706 | 20,620 | 20,605 | 20,629 | 20,289 | -340 | -1.6 % | 100.0 % |

The addition of rounded acreage figures may lead to differences in some cases.



COUNTRY REPORT: GERMANY

Acreage and variety development

As of 2024, Germany is once again the world's biggest hop producer, even though its hop growers reduced planted acreage by some 340 ha. This was done by cutting back **aroma hop** acreage by 814 ha, and increasing **bitter variety** acreage by 474 ha. As a result, yield potential is higher than in 2023 despite the lower acreage. Total acreage was 20,289 ha. The ratio of aroma to bitter varieties shifted to 47 : 53.

In the **Hallertau** growing region, acreage was reduced in total by 2% (aroma varieties -9%, bitter varieties +5%).

In the **Elbe-Saale** region, acreage also dropped by 2% (aroma varieties -6%, bitter varieties +1%). In the **Tettnang** region, total acreage increased by less than 1% (aroma varieties -1%, bitter varieties +6%). The measures taken in **Spalt** led to a decline in aroma variety acreage of 3% and an increase in bitter variety acreage of 8% (overall -2%). The growing areas' shares of the total acreage remained the same: Hallertau 16,815 ha (83%), Elbe-Saale 1,532 ha (8%), Tettnang 1,528 ha (7%), Spalt 396 ha (2%), and the rest 17 ha.

TOP 5 VARIETIES BY ACREAGE SHARE 2024



Of the five most important hop varieties grown in Germany, only the number-one variety saw any acreage expansion, while numbers two to five saw their acreage decline. The top five's acreage share in crop year 2024 was 77%, which was slightly less than in 2023.

Herkules consolidated its position as Germany's most important hop variety with an acreage increase of 419 ha (+6%). Despite seeing its acreage decline by 375 ha (-12%), **Perle** remained the undisputed number-two variety. **Hallertau Tradition** held onto third place, despite declining

by 241 ha (-9%). The bitter variety **Hallertau Magnum** shed 150 ha (-8%), but remained in fourth place. The **Hersbruck** variety remains in fifth place, having lost only 10 ha in planted area year on year (-1%).

Alongside Herkules, varieties with a significant acreage increase include the relatively new bitter variety **Titan** from the Hüll breeding program, with an increase of 228 ha (+243%), as well as **Polaris** – also a bitter variety from Hüll – with +27 ha (+5%).



COUNTRY REPORT: GERMANY

TOP 5 VARIETIES BY SHARE OF CROP VOLUME IN 2024



2023 and 2024 crop volumes and average yields

| Variety | 2023 | 2024 | Percentage change | Share of crop volume in 2024 | Ø Yield mt/ha | 2023 | 2024 | Ø 5 years |
|----------------------|---------------|---------------|-------------------|------------------------------|---------------|-------------|-------------|-----------|
| | mt | mt | | | 2023 | 2024 | 2023 | |
| Perle | 5,936 | 5,501 | -7.3 % | 11.8 % | 1.83 | 1.92 | 1.78 | |
| Hallertau Tradition | 4,747 | 5,095 | 7.3 % | 10.9 % | 1.76 | 2.07 | 1.81 | |
| Hersbruck Spaet | 1,251 | 1,470 | 17.5 % | 3.2 % | 1.59 | 1.90 | 1.71 | |
| Spalt Select | 924 | 971 | 5.1 % | 2.1 % | 1.75 | 1.94 | 1.82 | |
| Hallertau Mittelfruh | 787 | 947 | 20.3 % | 2.0 % | 1.28 | 1.58 | 1.41 | |
| Tettnang | 717 | 897 | 25.1 % | 1.9 % | 1.11 | 1.42 | 1.30 | |
| Saphir | 641 | 654 | 2.0 % | 1.4 % | 1.94 | 2.24 | 2.02 | |
| Mandarina Bavaria | 407 | 377 | -7.4 % | 0.8 % | 2.18 | 2.35 | 2.30 | |
| Northern Brewer | 308 | 298 | -3.2 % | 0.6 % | 1.60 | 1.70 | 1.61 | |
| Opal | 220 | 224 | 1.8 % | 0.5 % | 1.61 | 1.83 | 1.74 | |
| Akoya | 209 | 224 | 7.2 % | 0.5 % | 1.60 | 2.19 | 1.22 | |
| Amarillo | 223 | 209 | -6.3 % | 0.4 % | 2.47 | 2.79 | 2.53 | |
| Hallertau Blanc | 236 | 202 | -14.4 % | 0.4 % | 2.11 | 2.22 | 2.22 | |
| Saaz | 237 | 186 | -21.5 % | 0.4 % | 1.52 | 1.21 | 1.35 | |
| Tango | 80 | 154 | 92.5 % | 0.3 % | 1.29 | 1.74 | - | |
| Cascade | 139 | 129 | -7.2 % | 0.3 % | 2.14 | 2.03 | 2.12 | |
| Spalt | 98 | 117 | 19.4 % | 0.3 % | 0.93 | 1.17 | 1.09 | |
| Callista | 132 | 103 | -22.0 % | 0.2 % | 2.36 | 1.91 | 2.14 | |
| Other Aroma | 468 | 438 | -6.4 % | 0.9 % | 1.68 | 1.73 | - | |
| Total Aroma | 17,760 | 18,196 | 2.5 % | 39.1 % | 1.71 | 1.90 | 1.75 | |
| Herkules | 18,923 | 23,139 | 22.3 % | 49.7 % | 2.52 | 2.92 | 2.74 | |
| Hallertau Magnum | 3,079 | 3,051 | -0.9 % | 6.6 % | 1.74 | 1.88 | 1.90 | |
| Polaris | 885 | 1,266 | 43.1 % | 2.7 % | 1.58 | 2.15 | 1.78 | |
| Titan | 31 | 354 | 1041.9 % | 0.8 % | 0.33 | 1.10 | - | |
| Hallertau Taurus | 244 | 235 | -3.7 % | 0.5 % | 1.66 | 2.03 | 1.84 | |
| Nugget | 242 | 220 | -9.1 % | 0.5 % | 2.40 | 2.41 | 2.36 | |
| Other Bitter | 70 | 75 | 7.1 % | 0.2 % | 0.83 | 1.01 | 1.08 | |
| Total Bitter | 23,474 | 28,340 | 20.7 % | 60.9 % | 2.29 | 2.64 | 2.50 | |
| GERMANY TOTAL | 41,234 | 46,536 | 12.9 % | 100.0 % | 2.00 | 2.29 | 2.11 | |

The addition of rounded production figures may lead to differences in sum totals.

Crop volume

The 2023/2024 winter was consistently warmer than usual. Precipitation between October and April was approx. 40 % above average, which meant the soil had a sufficient supply of water. High temperatures in February and March caused vegetation to begin early. Pruning commenced at the beginning of March. The warm temperatures continued into mid-April, when conditions became cooler and wetter. Plant training was carried out in the period between April 20

and around May 10. Due to favorable conditions, the growth differences observed in the early vegetation phase quickly evened out from the beginning of May onward. By the end of May, vertical growth had exceeded the previous years' average.

Despite widespread flooding in the Hallertau and Tettnang growing regions following rainfall of 100 to 150 mm between May 31 and June 2, no lasting damage was caused.



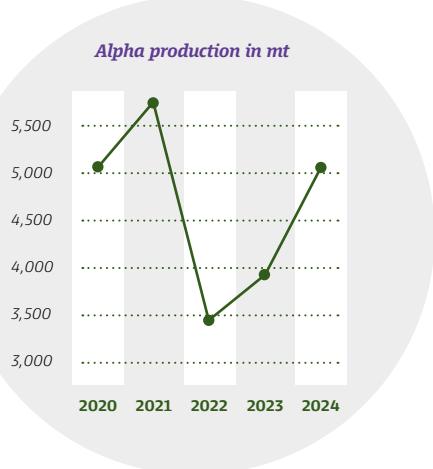
COUNTRY REPORT: GERMANY

Thanks to favorable weather conditions in June the plants developed well, leading to abundant flowering in early July. Midsummer temperatures and only local thundery rainfall at the end of July and in August benefitted cone development and led to good to very good yields in good hop sites. Harvesting began at the end of August, but was repeatedly interrupted due to rain.

Red mite infestation was kept well under control. Hop aphid control proved to be more difficult, while flea beetle infestation led to feeding damage. High disease pressure caused by downy and powdery mildew presented a major challenge. Despite intensive plant protection treatments, the high disease pressure – particularly affecting vulnerable varieties such as Herkules – led to impaired outer quality and in some cases even to crop failure.

The total volume of hops harvested in Germany in crop year 2024 was 46,536 mt, a year-on-year increase of 5,302 mt (13%). The Hallertau region accounted for 86.6% of the crop yield, followed by the Tettnang region with 6.3%, Elbe-Saale with 5.5%, and Spalt with 1.6%.

The average yield increased year on year by 15% to 2.29 mt/ha and was thus 8% higher than that of the the last five years. **Aroma variety** yield (mt/ha) increased by 11% year on year, exceeding the five-year average by 9%. **Bitter variety** yield was not only 15% higher year on year, but was no less than 6% higher than the last five years' average.



Alpha content

Although alpha acid content levels in the 2024 crop year were higher in many varieties year on year, they were lower than average when compared with several previous crop years. Only a small number of varieties reached levels above the five- and ten-year averages. An alpha acid content overview for individual varieties can be found in the ALPHA ACID PRODUCTION section (page 12).

The higher crop and alpha yields led to a year-on-year increase in alpha production of approximately 29%.

Market situation

Crop 2024 spot market

The market for non-contracted hops in 2024 was characterized by oversupply and a particularly late start. It was not until mid-October that pool and campaign offers had been made for all varieties. The only varieties for which initial bids were received in September were **Hallertau Mittelfrueh** and **Hersbruck**, with advance payment prices of 10.00 EUR/kg and 8.00 EUR/kg, respectively. The bitter varieties **Herkules**, **Hallertau Taurus**, **Polaris**, **Titan** and **Nugget** were purchased for an advance payment price of 20.00 EUR/kg alpha, while growers were paid 25.00 EUR/kg alpha for **Hallertau Magnum**. The advance payment price for varieties that were in particularly plentiful supply, such as **Hallertau Tradition** and **Perle**, was 1.00 EUR/kg. **Brewers Gold**, **Northern Brewer**, **Ariana** and **Cascade** hops were purchased for 3.00 EUR/kg; **Opal**, **Calista** and **Saphir** for 4.50 EUR/kg. The following advance payment prices were offered for the following varieties: **Spalt Select** and **Smaragd** 5.00 EUR/kg; **Saaz** and **Hersbruck** 8.00 EUR/kg; **Tettnang** and **Hallertau Mittelfrueh** 10.00 EUR/kg. Advance payment prices were below 1.00 EUR/kg for **Mandarina Bavaria** (0.70 EUR/kg), **Hallertau Blanc** (0.70 EUR/kg), and **Tango** (0.50 EUR/kg). There were only occasional fixed-price offers. These were mostly only a little above the known advance payment prices.

Contract market

Since as early as crop year 2019, the hop market has been structurally oversupplied – in the case of certain varieties considerably so. Acreage clearance is essential if the market is to return to equilibrium.

At the turn of the year 2024/2025, marketers approached growers with offers to cancel or switch out of existing forward contracts for **Hallertau Tradition**, **Perle** and **Hallertau Magnum** hops. The cancellation prices offered were 2.50 EUR per kg cancelled for **Perle** and **Hallertau Tradition** and 2.00 EUR/kg for **Hallertau Magnum**. Offers to switch from **Perle** and **Hallertau Tradition** to **Herkules** and **Titan** at 35 EUR/kg alpha were also made occasionally.

A large proportion of the existing forward contracts with both growers and breweries will expire in crop year 2025. As it is important for a certain group of brewery customers to secure hop supplies for the future by concluding long-term contracts, hop producers have been offered contracts for aroma and bitter hops despite the market surplus. However, the prices offered have reached a level at which hops cannot be grown profitably and are a clear sign that adjustments are necessary on the production side.

By spring, assuming average yields, 83% of the 2025 crop had been forward contracted. The forward contracting figures for the key hop-producing countries for crop years 2025 to 2028 can be found in the FORWARD CONTRACTS section (page 28).



COUNTRY REPORT: CZECH REPUBLIC

| Variety | Development of acreage | | | Development of production | | | |
|-----------------------------|------------------------|------------|--------------|---------------------------|---------------|---------------|--------------|
| | Acreage ha | | 2023 | 2024 | Ø Yield mt/ha | Production mt | |
| | 2023 | +/- | | | 2023 | 2024 | 2023 |
| Saaz | 4,047 | -68 | 3,980 | 1.32 | 1.25 | 5,331 | 4,960 |
| Sládek | 410 | 40 | 450 | 2.02 | 1.84 | 830 | 829 |
| Premiant | 197 | 4 | 201 | 2.29 | 1.75 | 452 | 350 |
| Other Aroma | 110 | 13 | 123 | 1.95 | 1.72 | 215 | 212 |
| Total Aroma | 4,765 | -12 | 4,753 | 1.43 | 1.34 | 6,827 | 6,351 |
| Agnus | 78 | -3 | 75 | 1.86 | 1.59 | 145 | 119 |
| Other Bitter | 17 | 0 | 17 | 1.44 | 1.42 | 25 | 24 |
| Total Bitter | 95 | -3 | 92 | 1.79 | 1.56 | 170 | 143 |
| CZECH REPUBLIC TOTAL | 4,860 | -15 | 4,845 | 1.44 | 1.34 | 6,997 | 6,494 |

The addition of rounded acreage figures may lead to differences in some cases.

Farm structure

There were 120 hop growers in the Czech Republic in crop year 2024 – two fewer than in the previous year. As total acreage also declined, the average planted acreage per farm remained unchanged at 40 ha.

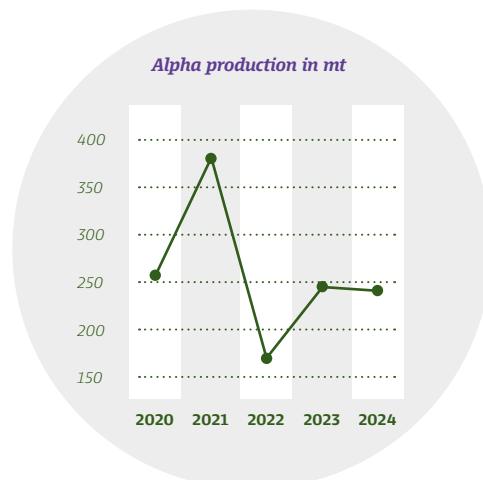
Acreage/crop volume/alpha content

The trellised area declined in the hop-producing regions of **Saaz** and **Auscha** by 31 ha and 2 ha, respectively, but increased by 18 ha in the **Tirschtitz** region. The varieties mainly affected by the acreage reduction were **Saaz** (-2 %) and **Agnus** (-4 %). By contrast, additional acreage was planted with **Sládek** (+10 %), **Premiant** (+2 %), and **other aroma varieties** (+12 %).

The weather conditions varied widely, with the overall effect that the vegetation status of the hop plants was in line with the long-term average. All the plants had been trained by the end of May. In June, typical summer weather with rain, but without major fluctuations in temperature, resulted in growth being a few days ahead of normal, which remained the case until picking began. Nearly all varieties had reached or exceeded trellis height by mid-July, by which time the hops were in early to full bloom, depending on the variety. Cone development was also evident among some of the **Saaz** hops. Picking began between August 19 and 24.

The production yield in the Czech Republic of 1.34 mt/ha was down year on year, but slightly exceeded the long-term average. The growing areas themselves performed very differently. In the **Saaz** region, yields were higher than the long-term average, whereas in **Auscha** and **Tirschtitz** they were lower.

The alpha values varied, too. In **Saaz** hops, they remained virtually unchanged year on year and were once more below average. The values for **Premiant** and **Sládek**, on the other hand, were higher year on year, roughly equaling the long-term average. The combination of lower crop volume and partly better alpha acid values resulted in a year-on-year fall in alpha yield of 3 %. An overview of alpha acid content



for individual varieties can be found in the ALPHA ACID PRODUCTION section (page 12).

Market situation

At the time of picking, approx. 95 % of the 2024 crop volume had already been forward-contracted. The small quantities of non-contracted hops available were bought up by the growers' trading partners, leaving no residual stocks. The contract prices paid to growers for the main varieties were 290 CZK/kg (11.45 EUR/kg) for **Saaz** and 190 CZK/kg (7.50 EUR/kg) for **Sládek** and **Premiant**. Finest aroma hops from the Czech Republic are highly sought after by a specific group of customers.

Assuming an average production volume, growers have already forward-contracted the entire 2025 crop. An overview of the development of forward contracting up to crop year 2028 can be found in the FORWARD CONTRACTS section (page 28).

In crop year 2025 the trellised area will be roughly 4,816 ha, representing a slight year-on-year reduction in acreage. The acreage planted with **Saaz** and **Premiant** hops will decrease by 26 ha and 12 ha, respectively, while **Sládek** acreage will increase by 12 ha.

The producers are keen to modernize their picking and drying machinery with the aim of raising efficiency and reducing the costs of their hop-growing operations.



COUNTRY REPORT: SLOVENIA

| Variety | Development of acreage | | | Development of production | | | |
|-----------------------|------------------------|------------|--------------|---------------------------|---------------|--------------|--------------|
| | Acreage ha | | 2023 | Ø Yield mt/ha | Production mt | | |
| | 2023 | +/- | 2024 | 2023 | 2024 | 2023 | 2024 |
| Aurora | 747 | -47 | 700 | 1.72 | 1.36 | 1,282 | 955 |
| Celeia | 473 | 26 | 499 | 1.69 | 1.53 | 799 | 761 |
| Bobek | 157 | 3 | 160 | 1.60 | 1.17 | 251 | 187 |
| Savinjski Golding | 142 | -7 | 135 | 1.17 | 1.08 | 166 | 146 |
| Other Aroma | 137 | -9 | 128 | 1.48 | 1.47 | 203 | 188 |
| Total Aroma | 1,656 | -34 | 1,623 | 1.63 | 1.38 | 2,701 | 2,237 |
| Total Bitter | 19 | 3 | 22 | 1.73 | 1.65 | 34 | 36 |
| SLOVENIA TOTAL | 1,676 | -31 | 1,644 | 1.63 | 1.38 | 2,735 | 2,273 |

The addition of rounded acreage figures may lead to differences in some cases.

Farm structure

In crop year 2024 the total number of hop producers remained unchanged year on year at 126. Of that number, 119 producers farm an average of 14 ha per entity, while the other seven grow hops on a very small scale for their own needs as craft brewers.

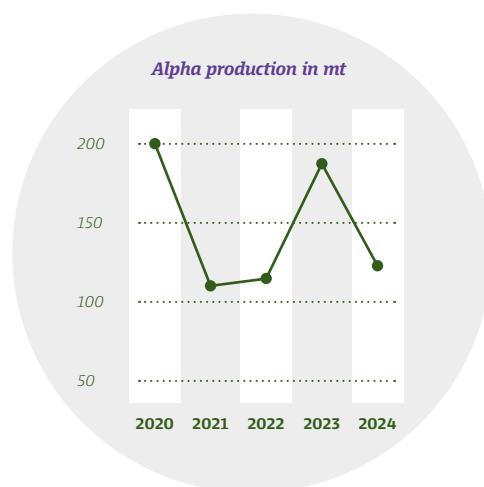
Acreage/crop volume/alpha content

Due to changes in the variety mix, the acreage planted with **Celeia** and **Bobek** hops expanded by 5 % and 2 %, respectively. By contrast, other varieties saw their acreage reduced – **Aurora** by 6 %, **Savinjski Golding** by 5 %, and the **other aroma varieties** by 7 %. Compared with the previous year, total acreage declined by 2 %.

The first months of 2024 were significantly warmer than the long-term average, with high rainfall. After rapid early growth, the plants were slightly ahead of normal to begin with. Training had largely been completed by the end of May. Conditions remained mainly warm, with above-average rainfall. Differences in plant development became evident, however: Plants in hop gardens with heavy soils and older plants were mostly thin and lagged up to two weeks behind the long-term average. Gardens with lighter soils and young plants developed normally.

Nearly all varieties produced significantly lower yields than in the previous year, particularly the main variety **Aurora** whose yield was 21 % down year on year and 14 % below the long-term average. The below-average overall yield of 1.38 mt/ha was 15 % down year on year.

The alpha acid content results were also disappointing. The combination of below-average production volume and well below-average alpha values resulted in a year-on-year decline in alpha yield of 35 %. An overview of alpha acid content for individual varieties can be found in the ALPHA ACID PRODUCTION section (page 12).



Market situation

When picking began, the growers had forward-contracted approximately 70 % of the 2024 crop volume. Demand for **Celeia** hops was comparatively high. The prices paid by dealers for the available non-contracted hops ranged between 8.00 and 8.50 EUR/kg. In addition, forward contracts were signed for this variety at prices between 7.50 EUR and 8.00 EUR/kg. There was hardly any demand for **Aurora** hops. Due to oversupply, growers were offered a price of only 1.00 EUR/kg. In spring 2025 growers still held unsold stocks amounting to roughly 150 mt. Most were **Aurora** hops in product form from the 2024 crop and in some cases from previous crop years.

Acreage planted with **Celeia** is set to increase further to meet the continuing demand for this variety. On the other hand, more **Aurora** hop acreage is expected to be cleared. In total, hop acreage in Slovenia is expected to decline by about 3 %. Assuming an average yield, approx. 75 % of the coming crop has been forward-contracted. An overview of the development of forward contracting up to crop year 2028 can be found in the FORWARD CONTRACTS section (page 28).



COUNTRY REPORT: POLAND

| Variety | Development of acreage | | | Development of production | | | |
|---------------------|------------------------|------------|--------------|---------------------------|---------------|--------------|--------------|
| | Acreage ha | | 2023 | Ø Yield mt/ha | Production mt | | |
| | 2023 | +/- | 2024 | 2024 | 2023 | 2024 | |
| Lubelski | 266 | 25 | 291 | 1.88 | 1.51 | 499 | 440 |
| Marynka | 271 | -38 | 234 | 1.87 | 1.66 | 508 | 388 |
| Sybilla | 89 | -2 | 87 | 1.79 | 1.43 | 160 | 124 |
| Other Aroma | 146 | -17 | 129 | 1.93 | 1.74 | 283 | 224 |
| Total Aroma | 772 | -32 | 740 | 1.88 | 1.59 | 1,449 | 1,176 |
| Hallertau Magnum | 639 | -42 | 598 | 2.29 | 2.02 | 1,461 | 1,209 |
| Magnat | 223 | -6 | 217 | 2.54 | 2.49 | 565 | 542 |
| Other Bitter | 18 | -3 | 16 | 1.61 | 1.67 | 30 | 27 |
| Total Bitter | 881 | -50 | 831 | 2.33 | 2.14 | 2,056 | 1,777 |
| POLAND TOTAL | 1,652 | -82 | 1,571 | 2.12 | 1.88 | 3,505 | 2,953 |

The addition of rounded acreage and production figures may lead to differences in some cases.

Farm structure

In 2024 the number of hop growers fell by a further 20. As total hop acreage decreased at the same time, the average acreage cultivated by the remaining 579 growers was down only slightly year on year at 2.7 ha per farm.

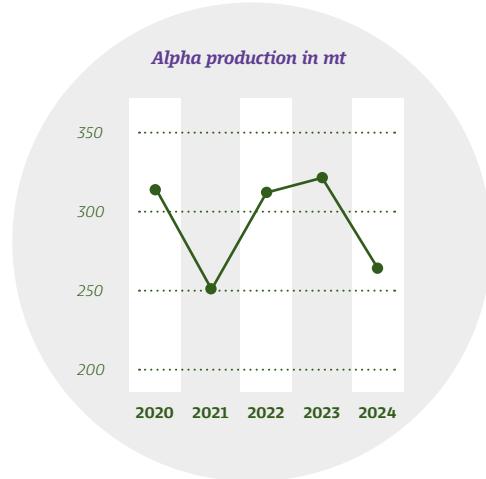
Acreage/crop volume/alpha content

Hop acreage in Poland declined in 2024 for the third year in succession, this time by 5 %. Although the acreage of most varieties was reduced, **Lubelski** acreage increased by 9 % to meet the growing demand for this variety. The ratio of aroma to bitter varieties remained unchanged at 47 to 53.

In April, there were extreme fluctuations in temperature from -8 °C to +28 °C. Depending on the time of pruning, this had a significant effect on plant development. The hop plants had reached or exceeded trellis height by the end of June. Coming into the second week of July, cone development varied considerably depending on the variety. Up until harvest time, significant differences could still be seen between the plants, even within single hop gardens. Picking began at the end of August, starting with **Lubelski** hops.

While aroma variety yields were below average, the bitter varieties almost equaled the last five-year average. The overall yield of 1.88 mt/ha was 11 % down year on year. At 1.51 mt/ha, **Lubelski** hop yield was 20 % lower than in 2023.

Hop alpha content was below average in the aroma varieties, while the bitter varieties slightly exceeded the long-term average. Lower acreage combined with the lower yield and lower alpha content resulted in a decline of 18 % in alpha yield compared with 2023, even though the overall average alpha content was slightly above the five-year average. An overview of alpha acid content for individual varieties can be found in the ALPHA ACID PRODUCTION section (page 12).



Market situation

At the time of picking, the growers had forward-contracted roughly 75 % of production volume. The contract prices for the aroma varieties **Lubelski** and **Marynka** were 22 - 30 PLN/kg (5.05 - 6.90 EUR/kg) and 22 - 24 PLN/kg (5.05 - 5.50 EUR/kg), respectively, while those paid for the bitter varieties **Hallertau Magnum** and **Magnat** were 18 - 21 PLN/kg (4.15 - 4.85 EUR/kg). The non-contracted quantities failed to find buyers. Spot market activity did not begin until the end of 2024. Prices were very low. **Marynka** hops sold for 18 PLN/kg (4.15 EUR/kg) and **bitter varieties** for 10 PLN/kg (2.30 EUR/kg). There were no non-contracted **Lubelski** hops available. All the hops harvested in 2024 were sold, leaving the market empty.

The acreage planted with **Marynka** and **Hallertau Magnum** hops is being reduced. **Lubelski** acreage on the other hand is expected to expand. As a result, there will be hardly any change in total acreage for 2025. Assuming an average yield, approx. 50 % of the coming crop has been forward-contracted. An overview of the development of forward contracting up to crop year 2028 can be found in the FORWARD CONTRACTS section (page 28).



COUNTRY REPORT: USA

Results for 2023 and 2024 by production region and variety group

WASHINGTON

Acreage ha

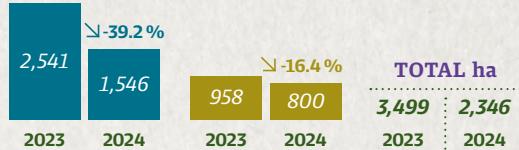


Production mt

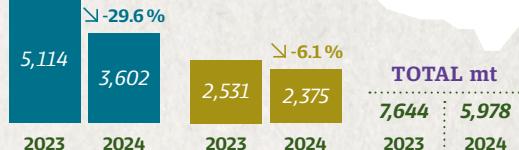


IDAHO

Acreage ha



Production mt



OREGON

Acreage ha



Production mt



USA PACIFIC NORTHWEST

Acreage ha

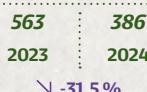


Production mt

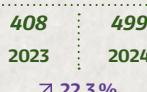


OTHER STATES

ACREAGE TOTAL ha

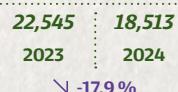


PRODUCTION TOTAL mt



USA TOTAL

ACREAGE TOTAL ha



PRODUCTION TOTAL mt



AROMA

BITTER

Due to the conversion of acres (ac) into hectares (ha) and pounds (lbs) into metric tons (mt), there may be minor statistical deviations and differences in sum totals due to figures being rounded up or down.



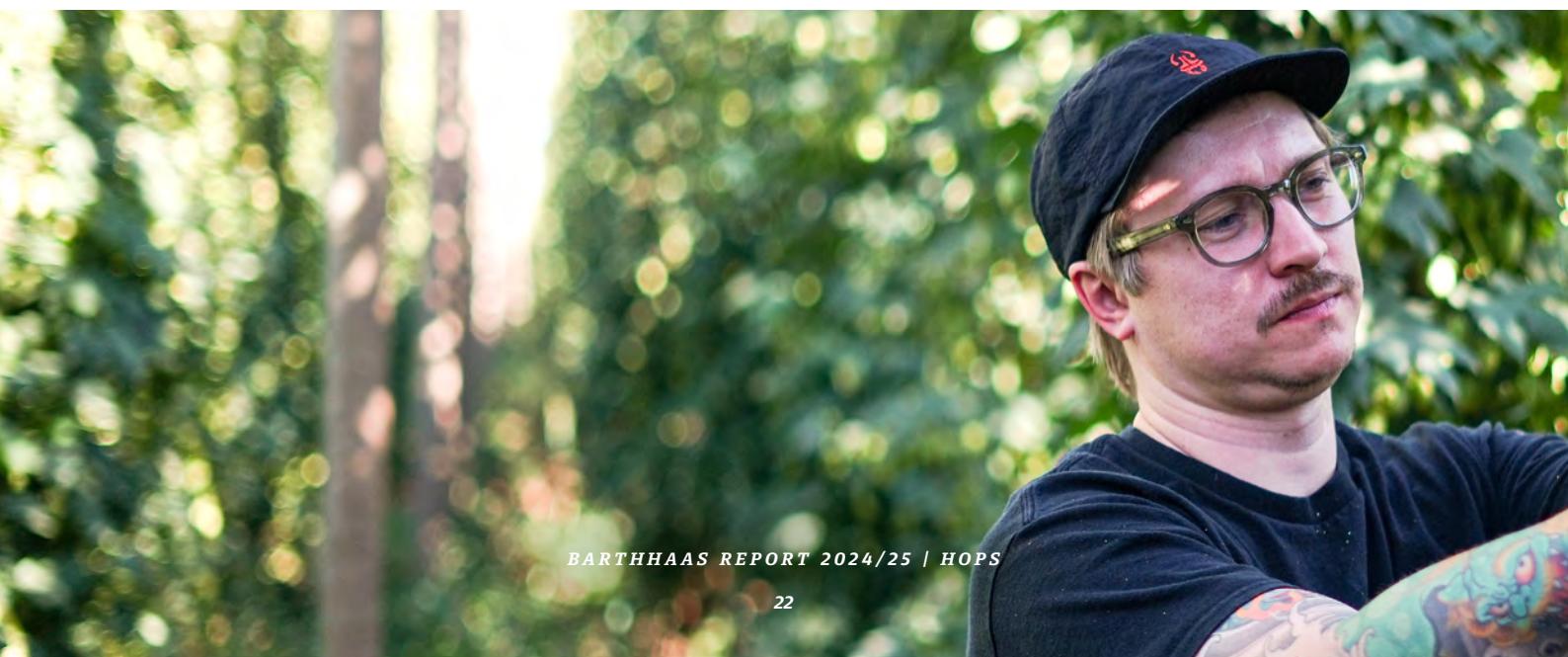
COUNTRY REPORT: USA

The summary below pertains to the traditional growing regions of Washington, Idaho, and Oregon, which are also referred to collectively as the Pacific Northwest (PNW) region. Developments outside the PNW states are reported in a separate section.

Acreage development in the PNW region over the past five years

| Variety | 2020 ha | 2021 ha | 2022 ha | 2023 ha | 2024 ha | Difference to previous year | Percentage change | Percentage of acreage 2024 |
|---------------------|---------------|---------------|---------------|---------------|---------------|-----------------------------|-------------------|----------------------------|
| Citra® | 4,450 | 4,849 | 4,874 | 3,584 | 2,742 | -842 | -23.5 % | 15.1 % |
| Mosaic® | 2,224 | 2,597 | 2,631 | 2,135 | 1,460 | -675 | -31.6 % | 8.1 % |
| Simcoe® | 1,665 | 1,643 | 1,806 | 1,702 | 1,383 | -319 | -18.8 % | 7.6 % |
| Cascade | 1,634 | 1,752 | 2,067 | 1,815 | 1,247 | -567 | -31.3 % | 6.9 % |
| Centennial | 1,222 | 968 | 1,001 | 1,028 | 1,011 | -17 | -1.6 % | 5.6 % |
| Amarillo® | 870 | 772 | 774 | 881 | 816 | -66 | -7.4 % | 4.5 % |
| Chinook | 766 | 718 | 840 | 688 | 510 | -178 | -25.9 % | 2.8 % |
| Strata® | 216 | 491 | 635 | 400 | 273 | -127 | -31.8 % | 1.5 % |
| El Dorado® | 641 | 702 | 471 | 349 | 273 | -76 | -21.8 % | 1.5 % |
| Willamette | 380 | 391 | 427 | 444 | 242 | -202 | -45.6 % | 1.3 % |
| Ekuanot® | 274 | 168 | 163 | 161 | 185 | 24 | 14.9 % | 1.0 % |
| Idaho7® | 366 | 397 | 219 | 177 | 159 | -18 | -10.2 % | 0.9 % |
| Azacca® | 292 | 295 | 352 | 162 | 149 | -14 | -8.3 % | 0.8 % |
| Palisade® | 103 | 138 | 156 | 108 | 131 | 23 | 21.0 % | 0.7 % |
| Crystal | 121 | 123 | 144 | 127 | 122 | -5 | -3.8 % | 0.7 % |
| Cluster | 175 | 166 | 123 | 87 | 117 | 30 | 34.5 % | 0.6 % |
| Mt. Rainer | 146 | 170 | 173 | 157 | 103 | -54 | -34.3 % | 0.6 % |
| Other Aroma | 2,557 | 2,996 | 2,675 | 1,789 | 1,531 | -258 | -14.4 % | 8.4 % |
| Total Aroma | 18,102 | 19,334 | 19,531 | 15,795 | 12,453 | -3,342 | -21.2 % | 68.7 % |
| CTZ | 2,544 | 2,254 | 1,828 | 2,571 | 2,201 | -371 | -14.4 % | 12.1 % |
| HBC 682 | 917 | 863 | 692 | 901 | 983 | 82 | 9.1 % | 5.4 % |
| Helios™ | - | - | - | 611 | 785 | 174 | 28.6 % | 4.3 % |
| Apollo™ | 388 | 374 | 397 | 409 | 437 | 28 | 6.9 % | 2.4 % |
| Eureka!™ | 263 | 323 | 400 | 464 | 345 | -119 | -25.6 % | 1.9 % |
| Pekko® | 324 | 433 | 439 | 423 | 162 | -261 | -61.7 % | 0.9 % |
| Super Galena™ | 227 | 229 | 159 | 159 | 160 | 1 | 0.4 % | 0.9 % |
| Nugget | 356 | 253 | 200 | 168 | 118 | -50 | -29.6 % | 0.7 % |
| Other Bitter | 610 | 571 | 548 | 481 | 484 | 2 | 0.5 % | 2.7 % |
| Total Bitter | 5,629 | 5,300 | 4,664 | 6,187 | 5,675 | -512 | -8.3 % | 31.3 % |
| PNW TOTAL | 23,732 | 24,635 | 24,195 | 21,982 | 18,127 | -3,855 | -17.5 % | 100.0 % |

The addition of rounded acreage figures may lead to differences in sum totals.





COUNTRY REPORT: USA

Farm structure

At the time of harvest in 2024, there were 67 hop farms in the Pacific Northwest, which was two fewer than the year before. At the same time, acreage fell once again (-18%). The average farm size decreased to 271 ha (-48 ha). This

decline applied to farms in all three producing states: The average farm size fell to 365 ha in Washington, 293 ha in Idaho, and 104 ha in Oregon.



Acreage and variety development

Acreage continued to decline in crop year 2024, with a reduction in planted area totaling 3,855 ha. This means that within the last three years 6,508 ha has been taken out of production.

In contrast to crop year 2023, **bitter variety** acreage was also reduced in 2024. It fell by 512 ha (-8%), while **aroma variety** acreage, having reached a peak of 19,500 ha in crop year 2022, declined by 36% within two years to stand at 12,453 ha in the reporting year. These reductions in acreage affected both proprietary and public varieties. The total planted area in the PNW at the time of harvest in 2024 amounted to 18,127 ha, of which **aroma varieties** took a share of 69%, compared with 72% in crop year 2023 and 81% in 2022. **Bitter varieties**, on the other hand, saw their share of total acreage increase from 28% in 2023 to 31% in 2024.

Aroma variety acreage decreased by 1,897 ha (-18%) in **Washington** state and 451 ha (-18%) in **Oregon**. By far the

greatest decline in aroma acreage was seen in **Idaho**, where it amounted to 995 ha (-39%). This was due to major cuts affecting Citra®, Mosaic®, Cascade, and Simcoe®. Bitter varieties were also cut back in all three states, with reductions of 325 ha (-7%) in **Washington**, 158 ha (-16%) in **Idaho**, and 29 ha in **Oregon**, leaving the total there at 171 ha (-15%).

The five most important US varieties had a combined share of total acreage of 50%, compared with 54% the previous year. **Citra®** remained the most widely grown variety for the seventh year in succession. Despite a decline in acreage of 14%, **CTZ** was once again the second most widely grown variety by virtue of a 41% increase in crop year 2023. **Mosaic®** remained the third most important variety although its acreage declined further by 675 ha (-32%). Acreage planted with **Cascade** was down by -31%, a steeper decline than that of **Simcoe®** with -19%. As a result, **Simcoe®** is now in 4th place, ahead of **Cascade** (5th place).





COUNTRY REPORT: USA

Outside the top 5, among the aroma varieties **Centennial** remained virtually unchanged, losing only 17 ha (-2%). Apart from **Ekuanot®**, **Palisade®** and **Cluster**, almost all the other aroma varieties saw their acreage fall – in some cases considerably. Among the bitter varieties, **Helios™** enjoyed another year of growth, with an increase of 174 ha (+29%). **HBC 682** grew by a further 82 ha (+9%), after expanding by 209 ha (+30%) in crop year 2023.

Crop volume

Due to the influence of El Niño in the winter of 2023-2024, the snowpack was at almost record low levels in some areas, particularly in the central mountain range and in the north of Washington state, and there was little rain. This led to a declaration of drought in Washington that remained effective until April 2024. As a result, the hop farmers in the Yakima Valley received only 55 % of the usual water volume from the irrigation systems.

The growing season began in cool, wet conditions. Hop plant growth following pruning was consequently retarded. Even by harvest time the varieties strung later were still slightly behind in terms of development. In June, the Yakima Valley went through an unusually cold spell. In contrast, the second week of July brought a heat wave with temperatures exceeding 30 °C. Precipitation had been significantly below average from the beginning of the year and amounted to only 1.3 mm in July. The only area to report above-average rainfall was Idaho. The harvest began several days later than usual. Hop ripening varied to such an extent that the farmers altered their usual harvesting schedules. Picking was interrupted by occasional storms.

High levels of red mite and powdery mildew pressure led to increased use of chemical plant protection agents, which presented challenges of its own and resulted in higher spending on pest and disease control measures. Growers face the additional challenge of having to make do with lower pesticide use, as residual level restrictions lead to ever greater reductions.

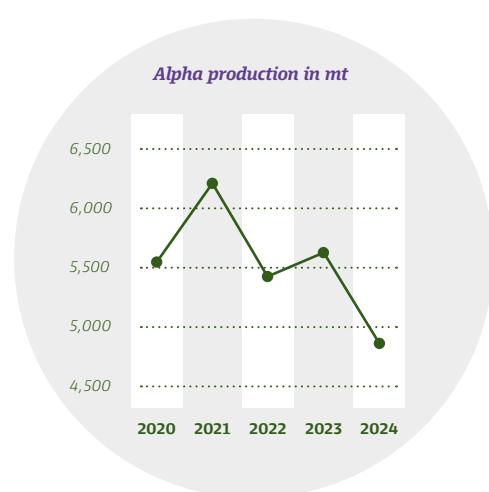
Although there were reports of forest fires on the west coast, there was little smoke drift into the hop-producing areas.

Towards the end of the season there were two fires in hop facilities. On one large farm a hop store caught fire, while the other fire broke out in a dealer's warehouse. The two fires mainly involved bitter varieties totaling approx. 400 mt.

According to the US Department of Agriculture statistics for 2024, the total volume of hops harvested in the PNW states was 39,496 mt, which represents a year-on-year decline of 16% and a decline of 25% compared with the

record crop volume harvested in the PNW in crop year 2021. The average yield of 2.18 mt/ha exceeded both the 2.15 mt/ha yield produced in 2023 and the average yield for the last five years of 2.07 mt/ha. Washington accounted for 74 % of crop yield, Idaho for 15 %, and Oregon for 11 %.

Of the total volume harvested, **aroma varieties** accounted for 24,447 mt, which was 21 % down year on year. The total volume of **bitter varieties** amounted to 15,048 mt, which was 7 % lower than in 2023. In the course of the last three crop years, the ratio of aroma to bitter varieties has changed significantly: from 75 : 25 in crop year 2022 to 66 : 34 in 2023 to 62 : 38 in 2024.



Alpha content

The average alpha content was above the long-term average at 12.2 %. An alpha acid content overview for individual varieties can be found in the ALPHA ACID PRODUCTION section (page 12).

Total crop volume was 16 % down year on year, while alpha acid production was down by 13 %.

Market situation

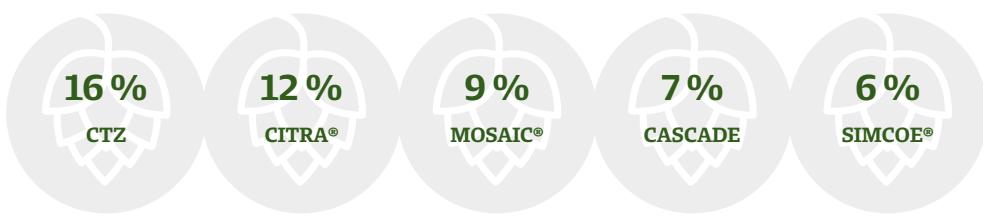
Crop 2024 spot market

Proprietary aroma and bitter varieties accounted for nearly 60 % of crop production. As this volume generally goes solely to the respective variety owners, approximately 60 % of the potential US crop is consequently unavailable for sale on the spot market. This, together with the number of hop contracts for public varieties, meant that only limited quantities reached the spot market. Due to above-average yields and qualities, some activity was seen in the non-contracted market around **Centennial** and also **Cascade** and **Chinook**.



COUNTRY REPORT: USA

TOP 5 VARIETIES BY SHARE OF CROP VOLUME IN 2024



2023 and 2024 crop volumes and average yields

| Variety | 2023 | 2024 | Percentage change | Share of crop volume in 2024 | Ø Yield mt/ha | 2023 | 2024 | Ø 5 years |
|---------------------|---------------|---------------|-------------------|------------------------------|---------------|-------------|-------------|-----------|
| | mt | mt | | | 2023 | 2024 | 2023 | 2024 |
| Citra® | 6,161 | 4,907 | -20.3 % | 12.4 % | 1.72 | 1.79 | 1.70 | |
| Mosaic® | 5,286 | 3,542 | -33.0 % | 9.0 % | 2.48 | 2.43 | 2.35 | |
| Cascade | 3,888 | 2,569 | -33.9 % | 6.5 % | 2.14 | 2.06 | 1.88 | |
| Simcoe® | 2,843 | 2,322 | -18.3 % | 5.9 % | 1.67 | 1.68 | 1.78 | |
| Centennial | 1,348 | 1,805 | 33.9 % | 4.6 % | 1.31 | 1.79 | 1.71 | |
| Amarillo® | 1,656 | 1,439 | -13.1 % | 3.6 % | 1.88 | 1.76 | 1.92 | |
| Chinook | 1,429 | 994 | -30.5 % | 2.5 % | 2.08 | 1.95 | 1.95 | |
| Strata® | 752 | 597 | -20.6 % | 1.5 % | 1.88 | 2.19 | 2.17 | |
| El Dorado® | 837 | 492 | -41.2 % | 1.2 % | 2.40 | 1.80 | 2.05 | |
| Idaho7® | 544 | 472 | -13.2 % | 1.2 % | 3.07 | 2.97 | 2.85 | |
| Ekuanot® | 420 | 424 | 0.9 % | 1.1 % | 2.61 | 2.28 | 2.63 | |
| Willamette | 691 | 388 | -43.8 % | 1.0 % | 1.56 | 1.61 | 1.64 | |
| Azacca® | 360 | 336 | -6.6 % | 0.9 % | 2.22 | 2.26 | 2.11 | |
| Palisade® | 275 | 323 | 17.4 % | 0.8 % | 2.55 | 2.47 | 2.38 | |
| Cluster | 170 | 246 | 45.4 % | 0.6 % | 1.95 | 2.11 | 2.08 | |
| Sabro® | 279 | 222 | -20.6 % | 0.6 % | 3.41 | 2.69 | 2.42 | |
| Crystal | 225 | 214 | -4.7 % | 0.5 % | 1.77 | 1.76 | 2.01 | |
| Mt. Rainer | 316 | 198 | -37.4 % | 0.5 % | 2.02 | 1.92 | 1.92 | |
| Cashmere | 295 | 155 | -47.7 % | 0.4 % | 1.98 | 1.82 | 1.76 | |
| Comet | 239 | 154 | -35.7 % | 0.4 % | 2.09 | 1.82 | 1.68 | |
| Calypso™ | 150 | 153 | 1.9 % | 0.4 % | 2.84 | 2.91 | 3.18 | |
| Mt. Hood | 205 | 126 | -38.9 % | 0.3 % | 1.44 | 1.54 | 1.47 | |
| Ahtanum® | 136 | 125 | -8.4 % | 0.3 % | 2.67 | 2.47 | 2.58 | |
| Tahoma | 366 | 124 | -66.1 % | 0.3 % | 1.85 | 1.70 | 1.82 | |
| Warrior® | 139 | 115 | -17.3 % | 0.3 % | 2.32 | 1.93 | 2.13 | |
| BRU-1™ | 156 | 110 | -29.1 % | 0.3 % | 2.68 | 1.89 | 1.94 | |
| Other Aroma | 1,788 | 1,896 | 6.0 % | 4.8 % | 1.99 | 2.10 | 2.13 | |
| Total Aroma | 30,955 | 24,447 | -21.0 % | 61.9 % | 1.96 | 1.96 | 1.90 | |
| CTZ | 7,188 | 6,466 | -10.0 % | 16.4 % | 2.80 | 2.94 | 2.80 | |
| HBC 682 | 2,052 | 2,251 | 9.7 % | 5.7 % | 2.28 | 2.29 | 2.48 | |
| Helios™ | 1,187 | 1,695 | 42.8 % | 4.3 % | 1.94 | 2.16 | 1.89 | |
| Apollo™ | 1,347 | 1,316 | -2.3 % | 3.3 % | 3.29 | 3.01 | 2.91 | |
| Eureka!™ | 1,403 | 1,117 | -20.3 % | 2.8 % | 3.02 | 3.24 | 2.86 | |
| Super Galena™ | 522 | 519 | -0.6 % | 1.3 % | 3.28 | 3.25 | 3.16 | |
| Pekko® | 1,099 | 327 | -70.3 % | 0.8 % | 2.60 | 2.02 | 2.11 | |
| Nugget | 417 | 296 | -29.1 % | 0.7 % | 2.48 | 2.50 | 2.38 | |
| Bravo™ | 311 | 214 | -31.3 % | 0.5 % | 3.05 | 2.81 | 2.78 | |
| Other Bitter | 713 | 848 | 18.9 % | 2.1 % | 1.88 | 2.08 | 2.22 | |
| Total Bitter | 16,238 | 15,048 | -7.3 % | 38.1 % | 2.62 | 2.65 | 2.59 | |
| PNW TOTAL | 47,193 | 39,496 | -16.3 % | 100.0 % | 2.15 | 2.18 | 2.07 | |

The addition of rounded production figures may lead to differences in sum totals.



COUNTRY REPORT: USA



In general, spot prices remained stable. Aroma varieties were traded in typical craft market price ranges, while bitter varieties as a rule were bought at the prevailing alpha kilo prices.

Contract market

The effects of the acreage reductions in recent years finally became noticeable when on 1 March, 2025 the US government (USDA-NASS) reported a year-on-year decline in the hop stocks held by the industry, mostly dealers, amounting to 5,000 mt (-6%). Despite this slight decrease, however, inventory levels within the industry as a whole still stood at 78,635 mt, which corresponds to almost two full years of production.

As the craft beer brewers are only gradually using up the excess stocks from the previous year, they are less inclined to enter into long-term forward contracts to meet any new hop requirements, preferring spot purchases or one-year contracts instead. This is due to many factors, including the current general availability of virtually all major US varieties.

Short-term purchasing is also a safer option, as it is difficult for brewers to forecast consumer demand in terms of beer volumes and styles several years in advance. This purchasing behavior has led to similarly short-term contracting between dealers and growers.

However, it should be noted that this lack of clarity as to actual hop demand (regarding both volume and varieties) makes it much more difficult for the hop industry to make accurate planting decisions and consequently increases the risk of supply imbalances in the future, regardless of whether that is due to overproduction or under-production.

US hop farm operating costs remain under sustained inflationary pressure. Growers continue to labor under significant increases in virtually every cost category. Labor remains the largest cost component, accounting in the meantime for roughly 50 % of total production costs in many operations.

These costs reflect not only rising hourly wages, but also mandatory benefits, such as health care, and new rules governing overtime pay that are being phased in throughout Washington and Oregon. Additional administrative and compliance-related expenses, particularly in connection with food safety, sustainability protocols, and customer-specific audits, have grown both in scale and in frequency.

The financial burden of past years' infrastructure and acreage expansions also continues to affect bottom lines of both growers and dealers. Some of these investments have made for greater operating efficiency and improved quality and consistency, while others were intended for expansion of production capacity that has now been idled.

Outside the Pacific Northwest

Outside the traditional hop-producing regions of the Pacific Northwest, hops continue to be grown on a modest scale in 26 other US states. The quantities produced here are sold primarily to local and regional craft brewers through direct local relationships and sales models. Despite their small scale, they reflect an interest in local ingredient sourcing and regional differentiation.

Non-PNW hop acreage declined from 563 ha in crop year 2023 to 386 ha in 2024, which constitutes a decline of 31 %. The non-PNW share of total US hop acreage was 2.5 % in 2023 and 2.1 % in 2024, indicating continued consolidation in the major hop-growing regions. Non-PNW production remains concentrated mainly in three states: **Michigan**, **New York**, and **Montana**. As a rule, the hop farms there are considerably smaller than those in the PNW and are predominantly planted with public varieties. The total production volume from the non-PNW states is estimated at around 500 mt.



COUNTRY REPORT: AUSTRALIA - CROP YEAR 2025

| Variety | Development of acreage | | | Development of production | | | |
|------------------------|------------------------|------------|------------|---------------------------|---------------|--------------|--------------|
| | Acreage ha | | 2024 | Ø Yield mt/ha | Production mt | | |
| | 2024 | +/- | 2025 | 2025 | 2024 | 2025 | |
| Galaxy® | 420 | -51 | 369 | 2.10 | 2.59 | 879 | 955 |
| Vic Secret™ | 96 | -15 | 80 | 2.61 | 3.05 | 251 | 245 |
| Pride of Ringwood | 60 | 0 | 60 | 1.42 | 1.42 | 85 | 85 |
| Super Pride | 49 | 0 | 49 | 1.63 | 1.63 | 80 | 80 |
| Ella™ | 41 | 5 | 45 | 1.33 | 2.26 | 55 | 103 |
| Eclipse® | 29 | 5 | 34 | 2.41 | 2.82 | 69 | 95 |
| Enigma® | 30 | -6 | 24 | 1.35 | 1.43 | 41 | 35 |
| Cascade | 16 | 7 | 23 | 1.12 | 0.82 | 18 | 19 |
| Topaz™ | 14 | -6 | 8 | 2.00 | 2.14 | 28 | 17 |
| Cluster | 3 | 0 | 3 | 0.67 | 0.67 | 2 | 2 |
| AUSTRALIA TOTAL | 758 | -62 | 695 | 1.99 | 2.35 | 1,508 | 1,635 |

The addition of rounded acreage and production figures may lead to differences in some cases.

Farm structure

In crop year 2025, Hop Products Australia (HPA) farmed a total planted area of 566 ha (2024: 670 ha) on its farms in Tasmania and Victoria. The average hop acreage farmed by the remaining three growers in Australia is 43 ha per farm. In 2024, there were four other farms apart from HPA, with an average planted area of 22 ha.

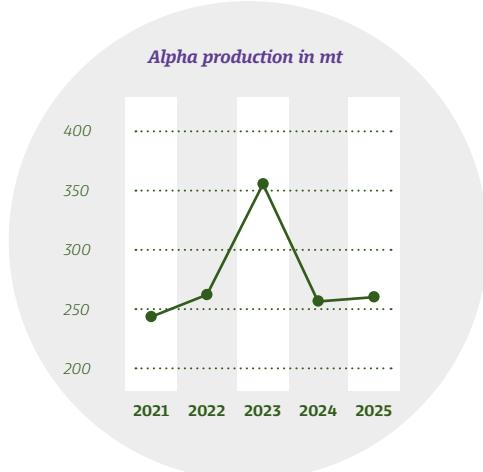
Acreage/crop volume/alpha content

Total planted area declined once again, this time by 62 ha (-8%). While the acreage of **Galaxy®**, **Vic Secret™**, **Enigma®** and **Topaz™** was reduced, that of **Ella™**, **Eclipse®** and **Cascade** hops was increased.

The return of El Niño brought almost perfect weather conditions to Tasmania for the first time in years. A dry and cold winter created ideal conditions for dormancy, while a wet and hot summer resulted in rapid growth and robust plants with the greatest number of flowering sites in recent memory. In Victoria, temperatures were above average, with average solar radiation, while rainfall was below average, with the exception of localized flooding at the beginning of spring.

Crop yield in Tasmania and Victoria was significantly higher year on year and also exceeded the five-year average. In spite of the reduction in acreage, the total volume of hops harvested was greater.

The alpha content of **Topaz™** hops was higher year on year. In most of the other varieties, however, alpha levels were lower. The increase in crop volume compared with the previous year largely compensated for the lower average alpha content, with the result that the alpha yield was virtually unchanged year on year.

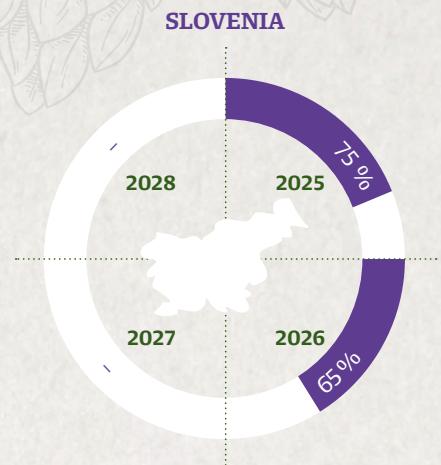
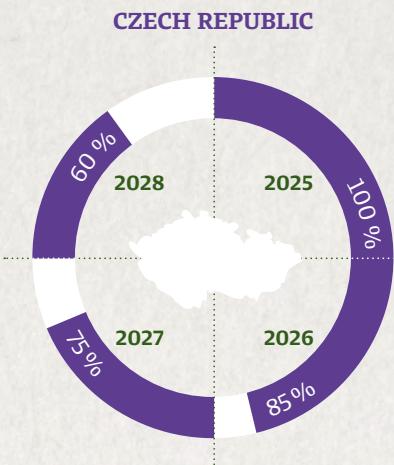
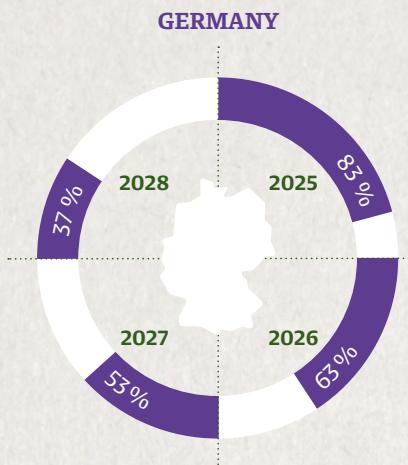


Market situation

Due to the current oversupply and the consequently weak global demand for hops, Hop Products Australia (HPA) has idled part of its hop acreage. As a result of above-average crop volume, quantities of the 2025 crop are available for sale on the open market.

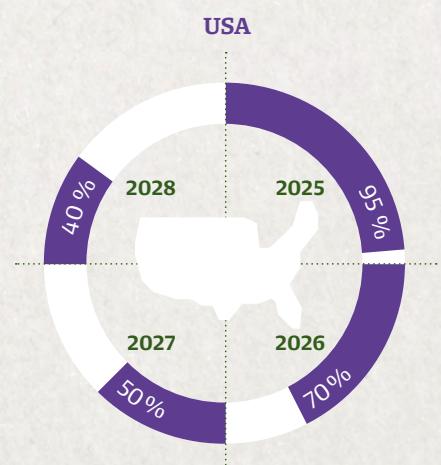
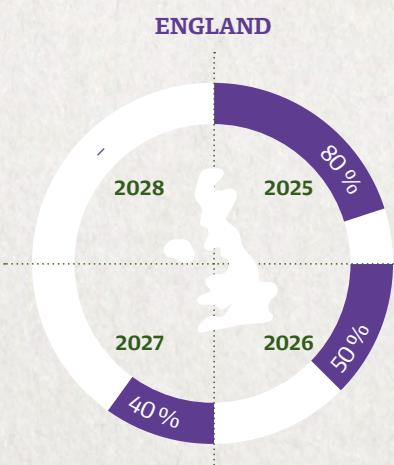
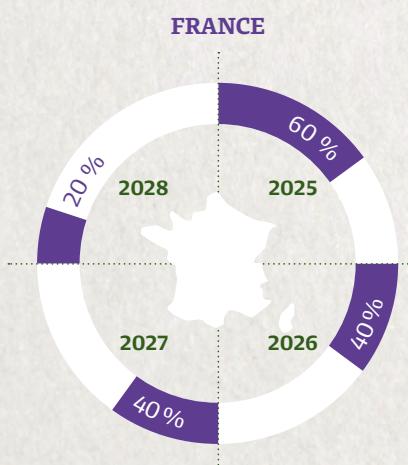
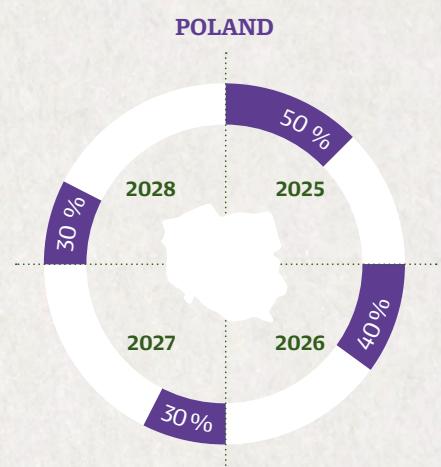


HOP FORWARD CONTRACT RATES



**FORWARD
CONTRACT
RATES**
(AS PER SPRING 2025)

The forward contract rates are based on data from the International Hop Growers Convention (IHGC) from May 2025.



CONVERSION TABLE WEIGHTS AND MEASURES

Area:

| | |
|--|---------------|
| 1 hectare (ha) = 10,000 m ² | = 2,471 acres |
| 1 acre | = 0.4047 ha |

Weight:

| | |
|------------------------------|-------------------------------|
| 1 metric ton (mt) = 1,000 kg | = 20 Ztr. (DE) = 2,204.6 lbs |
| 1 Zentner (Ztr./DE) = 50 kg | = 110.23 lbs = 1.102 cwt (US) |
| | = 110.23 lbs = 0.984 cwt (GB) |

| | |
|--------------------------|----------------------|
| 1 hundredweight (cwt/US) | = 100 lbs = 45.36 kg |
| | = 0.9072 Ztr. |

| | |
|--------------------------|-----------------------|
| 1 hundredweight (cwt/GB) | = 112 lbs = 50.800 kg |
| | = 1.0160 Ztr. |

| | |
|----------------|----------------------|
| 1 centner (GB) | = 100 lbs = 45.36 kg |
| | = 0.9072 Ztr. |

| | |
|------|---------------|
| 1 kg | = 2.20462 lbs |
| 1 lb | = 0.45359 kg |

Volume:

| | |
|--------------------|-------------------------------|
| 1 hl = 100 l | = 26.42 gal = 0.8523 bbl (US) |
| 1 hl = 100 l | = 22.01 gal = 0.6114 bbl (GB) |
| 1 barrel (bbl/USA) | = 31 gal = 1.1734 hl |
| 1 barrel (bbl/GB) | = 36 gal = 1.6365 hl |



DEVELOPMENT OF ACREAGE

HOP AREA UNDER CULTIVATION IN HA



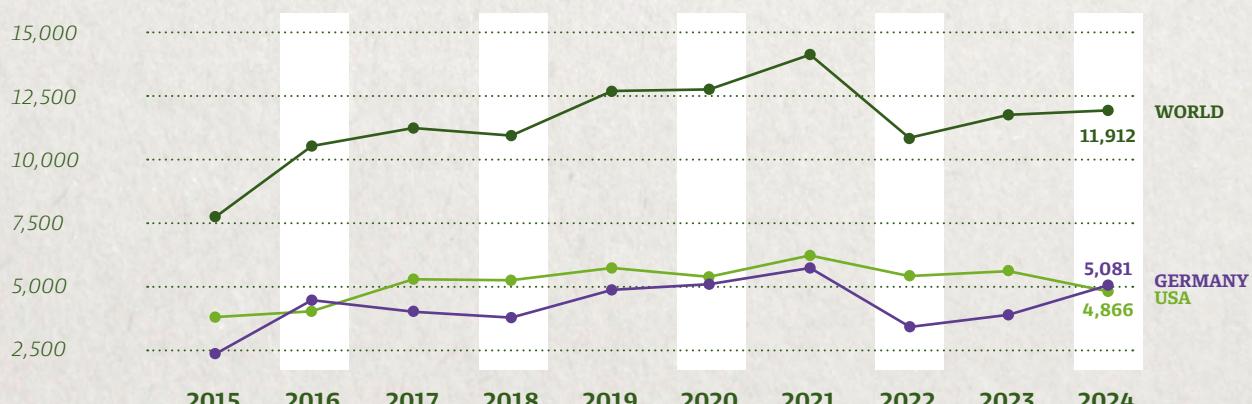
DEVELOPMENT OF CROP

HOP PRODUCTION IN MT



DEVELOPMENT OF ALPHA VOLUME

HOP ALPHA PRODUCTION IN MT







OUTLOOK 2025

Reporting period: Early June 2025

Germany

The total planted area for the 2025 harvest season reported by the German hop growers' association is 18,962 hectares, representing a year-on-year contraction of 1,327 hectares, or 7%. This contraction applies to both aroma variety and bitter variety acreage. Aroma varieties shed 1,156 hectares (-12%), while bitter varieties lost 170 hectares (-2%). The ratio of aroma to bitter varieties has shifted from 47:53 one year ago to 44:56.

Within the variety groups themselves some varieties have grown in terms of acreage while others have shrunk. The most important aroma varieties are by far the greatest losers in terms of acreage, with **Perle** hops losing 517 ha (-18%) and **Hallertau Tradition** 444 ha (-18%). Among the bitter varieties, **Hallertau Magnum** has seen planted area decline by 292 ha (-18%), whereas **Titan** hops have gained 238 ha (+74%).

The rankings of the most widely grown varieties remain unchanged: **Herkules** (41%), **Perle** (12%), **Hallertau Tradition** 11%, **Hallertau Magnum** (7%), **Hersbruck Spaet** (4%).

A wet autumn in 2024 was followed by a rather dry and mild winter 2024/2025. By the beginning of spring the soil was well saturated and the soil structure itself had been improved by good frost action. Thanks to the mainly dry weather in March, ground conditions in the hop gardens were suitable for vehicles and pruning was completed within the normal period. Warm temperatures encouraged plant growth well into April and most of the plants were trained in the period from late April to early May, which was about one week earlier than normal. In May, a combination of low rainfall and cool night temperatures slowed plant growth. By the end of May, early plant development gains had virtually disappeared. Widespread rainfall in early June put an end to the spring drought and restored the plants' good appearance. Until the end of the reporting period, disease pressure was lower than in the previous year.

USA (PNW)

According to data provided by the U.S. Department of Agriculture, hop acreage in the growing areas in the Pacific Northwest region of the USA in crop year 2025 is being reduced by 1,036 hectares to a total of 17,091 hectares, representing a year-on-year decline of 6 %. This is having a

particularly strong impact on bitter varieties whose planted area has shrunk by 1,012 hectares (18%). The area planted with aroma varieties has been reduced by only 24 hectares. The ratio of aroma to bitter varieties has consequently shifted from 69:31 in crop year 2024 to 73:27 now.

The most extensive reductions in planted area apply to the bitter varieties **Helios™**, **CTZ**, **HBC 682**, and **Apollo™**, with a total of 1,070 ha (-24%). Despite the considerable reduction in acreage of **CTZ**, this variety remains in second place in the US variety rankings with an acreage share of 12 %.

The largest expansion, amounting to 289 ha (+11 %), has been seen by the aroma variety **Citra®**. It retains its position as the most widely grown variety in the USA, having now increased its share of total acreage year on year from 15 % to 18 %. One variety that is seeing remarkable expansion is **Talus®** whose planted area has increased by 161 ha (397 %). Other varieties in the aroma segment have shed acreage, however, some of them significantly: **Cascade** -178 ha (-14 %), **Strata®** -96 ha (-35 %), **Palisade®** -82 ha (-63 %).

In the 2024/2025 winter season, the Pacific Northwest experienced mild La Niña conditions. Temperatures overall were average. Due to mild weather conditions in March and April, most varieties began to sprout at the normal time. Although early growth was initially slow, by the end of May the plants had largely reached a normal stage of development.

In the Yakima River Basin, the total reservoir water storage volume had fallen below the long-term average by the end of May. The U.S. Bureau of Reclamation had to start allocating water resources. In Oregon, on the other hand, there have been no indications of water supply bottlenecks up to now.

World

World hop acreage continues to decline. In crop year 2025 it will probably amount to approx. 52,900 hectares – roughly 2,850 hectares less than in the previous year, representing a contraction of 5 percent. Despite a reduction in hop acreage over the past four years totaling approx. 10,000 , market equilibrium has not yet been achieved. The hop market remains structurally oversupplied.



BEER PRODUCTION 2023/2024

It is becoming increasingly difficult to obtain figures for beer output volume for individual countries. There are often major discrepancies in the production figures based on data from different sources. The output volumes here, which in some cases are estimates, are based on close scrutiny of all the data available and on our own judgement.

| Europe | | | | America | | | |
|---------|--------------------|--------|--------|--------------|--------------------|----------------|----------------|
| Ranking | Country | 2023 | 2024 | Ranking | Country | 2023 | 2024 |
| 5 | Russia | 83,400 | 90,830 | 2 | USA | 193,701 | 184,500 |
| 6 | Germany | 84,782 | 83,925 | 3 | Brazil | 148,907 | 147,418 |
| 8 | Spain | 41,458 | 41,300 | 4 | Mexico | 142,410 | 144,973 |
| 10 | United Kingdom | 34,196 | 36,102 | 14 | Colombia | 27,400 | 27,990 |
| 11 | Poland | 35,200 | 34,600 | 19 | Canada | 20,819 | 20,403 |
| 16 | France | 22,000 | 21,270 | 20 | Argentina | 20,639 | 20,300 |
| 17 | Netherlands | 22,358 | 21,250 | 28 | Peru | 15,146 | 15,048 |
| 18 | Belgium | 21,540 | 21,000 | 33 | Chile | 11,940 | 11,343 |
| 21 | Czech Republic | 20,005 | 20,000 | 39 | Ecuador | 6,859 | 6,800 |
| 23 | Italy | 17,430 | 17,500 | 45 | Guatemala | 5,202 | 5,302 |
| 29 | Romania | 14,940 | 15,000 | 46 | Venezuela | 4,703 | 5,200 |
| 30 | Ukraine | 13,340 | 14,000 | 52 | Dominican Republic | 4,424 | 4,420 |
| 34 | Turkey | 11,330 | 11,100 | 62 | Bolivia | 3,591 | 3,590 |
| 35 | Austria | 9,980 | 10,095 | 63 | Panama | 3,328 | 3,380 |
| 37 | Ireland | 8,209 | 8,300 | 71 | Paraguay | 2,767 | 2,874 |
| 38 | Portugal | 7,554 | 7,600 | 76 | Cuba | 2,323 | 2,454 |
| 41 | Denmark | 6,474 | 6,390 | 85 | Uruguay | 1,687 | 1,692 |
| 43 | Hungary | 5,193 | 5,550 | 88 | Costa Rica | 1,576 | 1,576 |
| 51 | Bulgaria | 4,687 | 4,700 | 92 | Honduras | 1,570 | 1,492 |
| 55 | Greece | 4,026 | 4,100 | 95 | El Salvador | 1,299 | 1,325 |
| 56 | Sweden | 4,020 | 4,000 | 98 | Nicaragua | 1,202 | 1,212 |
| 58 | Belarus | 3,970 | 3,850 | 102 | Puerto Rico | 1,093 | 1,100 |
| 59 | Switzerland | 3,805 | 3,754 | 113 | Trinidad | 606 | 595 |
| 65 | Serbia | 3,348 | 3,235 | 117 | Guyana | 485 | 495 |
| 66 | Finland | 3,251 | 3,228 | 122 | Jamaica | 409 | 411 |
| 68 | Croatia | 3,375 | 3,015 | 138 | Haiti | 197 | 195 |
| 70 | Slovakia | 2,986 | 2,900 | 144 | St. Lucia | 177 | 173 |
| 72 | Lithuania | 2,860 | 2,780 | 147 | Bahamas | 149 | 146 |
| 73 | Norway | 2,788 | 2,730 | 149 | Dutch Antilles | 141 | 138 |
| 83 | Slovenia | 1,800 | 1,800 | 152 | Suriname | 101 | 99 |
| 89 | Moldova | 1,400 | 1,500 | 155 | Barbados | 81 | 79 |
| 94 | Georgia | 1,330 | 1,360 | 157 | Martinique | 61 | 60 |
| 105 | Estonia | 977 | 940 | 158 | Aruba | 56 | 57 |
| 107 | Bosnia-Herzegovina | 860 | 825 | 160 | St. Vincent | 46 | 45 |
| 110 | Albania | 765 | 753 | 161 | Belize | 40 | 40 |
| 111 | Latvia | 741 | 738 | 162 | Grenada | 32 | 32 |
| 118 | North Macedonia | 505 | 490 | 163 | St. Kitts | 26 | 26 |
| 121 | Cyprus | 421 | 429 | 164 | Antigua | 20 | 20 |
| 125 | Armenia | 283 | 352 | 165 | Cayman Islands | 20 | 20 |
| 132 | Montenegro | 295 | 280 | 168 | Dominica | 11 | 11 |
| 136 | Luxembourg | 253 | 222 | TOTAL | | 508,517 | 514,181 |
| 137 | Malta | 186 | 196 | TOTAL | | 625,244 | 617,034 |
| 139 | Iceland | 196 | 192 | | | | |

Italics: Corrections of figures for 2023 stated in last year's report. These figures only became known after going to press, or were subsequently corrected.

All figures in 1,000 hl ordered according to output volume in 2024

**Africa**

| Ranking | Country | 2023 | 2024 |
|---------|--------------------------------|----------------|----------------|
| 9 | South Africa | 35,100 | 37,000 |
| 22 | Nigeria | 17,729 | 19,147 |
| 25 | Angola | 12,000 | 16,200 |
| 32 | Ethiopia | 12,670 | 13,700 |
| 36 | Cameroon | 9,100 | 9,300 |
| 44 | Dem. Rep. of the Congo (Zaire) | 5,200 | 5,371 |
| 49 | Tanzania | 4,691 | 4,831 |
| 50 | Ivory Coast | 4,600 | 4,800 |
| 53 | Mozambique | 4,095 | 4,258 |
| 54 | Kenya | 4,500 | 4,200 |
| 57 | Uganda | 3,741 | 3,986 |
| 60 | Ghana | 3,465 | 3,707 |
| 61 | Congo (Brazzaville) | 3,500 | 3,600 |
| 67 | Burkina Faso | 3,450 | 3,100 |
| 75 | Zimbabwe | 2,200 | 2,460 |
| 77 | Sambia | 2,153 | 2,340 |
| 79 | Gabun | 1,800 | 2,000 |
| 82 | Namibia | 1,735 | 1,850 |
| 84 | Tunisia | 1,933 | 1,720 |
| 86 | Lesotho | 1,667 | 1,660 |
| 87 | Rwanda | 1,500 | 1,614 |
| 91 | Algeria | 1,550 | 1,500 |
| 93 | Madagascar | 1,408 | 1,420 |
| 96 | Benin | 1,310 | 1,280 |
| 97 | Togo | 1,200 | 1,240 |
| 100 | Malawi | 1,100 | 1,158 |
| 103 | Chad | 980 | 951 |
| 104 | Egypt | 900 | 943 |
| 108 | Morocco | 835 | 818 |
| 109 | Botswana | 792 | 788 |
| 116 | Mauritius | 485 | 512 |
| 123 | Guinea Conakry | 370 | 382 |
| 124 | Equatorial Guinea | 352 | 358 |
| 128 | Burundi | 370 | 320 |
| 130 | Central African Republic | 280 | 285 |
| 131 | Eritrea | 280 | 280 |
| 134 | Réunion | 225 | 225 |
| 135 | Kingdom Eswatini | 225 | 225 |
| 140 | Mali | 190 | 190 |
| 141 | Sierra Leone | 190 | 189 |
| 143 | Senegal | 170 | 175 |
| 145 | Liberia | 145 | 150 |
| 150 | Seychelles | 100 | 101 |
| 153 | Niger | 100 | 98 |
| 159 | Guinea Bissau | 45 | 50 |
| 166 | Cape Verde | 12 | 16 |
| 167 | São Tomé and Príncipe | 10 | 12 |
| 173 | South Sudan | 2 | 2 |
| 174 | Gambia | 0 | 2 |
| | TOTAL | 150,455 | 160,514 |

Australia/Oceania

| Ranking | Country | 2023 | 2024 |
|---------|------------------|---------------|---------------|
| 31 | Australia | 14,368 | 13,940 |
| 69 | New Zealand | 2,810 | 2,960 |
| 112 | Papua New Guinea | 705 | 687 |
| 142 | Tahiti | 180 | 180 |
| 146 | New Caledonia | 150 | 150 |
| 148 | Fiji Islands | 146 | 140 |
| 151 | Samoa | 100 | 100 |
| 156 | Solomon Islands | 65 | 65 |
| 170 | Vanuatu | 9 | 9 |
| | TOTAL | 18,533 | 18,231 |

Asia

| Ranking | Country | 2023 | 2024 |
|---------|-------------------------|----------------|----------------|
| 1 | China | 359,080 | 341,000 |
| 7 | Japan | 45,963 | 44,840 |
| 12 | India | 29,335 | 32,771 |
| 13 | Vietnam | 32,762 | 31,432 |
| 15 | Thailand | 21,050 | 22,825 |
| 24 | Philippines | 16,600 | 17,500 |
| 26 | South Korea | 16,871 | 16,196 |
| 27 | Cambodia | 15,000 | 16,000 |
| 40 | Myanmar | 4,750 | 6,440 |
| 42 | Laos | 5,800 | 6,000 |
| 47 | Kazakhstan | 6,112 | 5,189 |
| 48 | Republic China - Taiwan | 5,351 | 5,022 |
| 64 | Indonesia | 3,326 | 3,330 |
| 74 | Uzbekistan | 2,679 | 2,700 |
| 78 | Sri Lanka | 2,100 | 2,100 |
| 80 | Nepal | 1,800 | 2,000 |
| 81 | Israel | 1,972 | 1,992 |
| 90 | Malaysia | 1,532 | 1,500 |
| 99 | Singapore | 1,218 | 1,200 |
| 101 | Mongolia | 1,000 | 1,100 |
| 106 | Iran | 900 | 900 |
| 114 | Azerbaijan | 526 | 518 |
| 115 | Kyrgyzstan | 405 | 512 |
| 119 | Bhutan | 370 | 480 |
| 120 | China - Hong Kong | 500 | 480 |
| 126 | Turkmenistan | 420 | 350 |
| 127 | Tajikistan | 365 | 325 |
| 129 | Lebanon | 348 | 320 |
| 133 | Jordan | 247 | 251 |
| 154 | Pakistan | 80 | 80 |
| 169 | Bangladesh | 39 | 10 |
| 171 | North Korea | 8 | 8 |
| 172 | Palestine | 4 | 4 |
| | TOTAL | 578,513 | 565,375 |

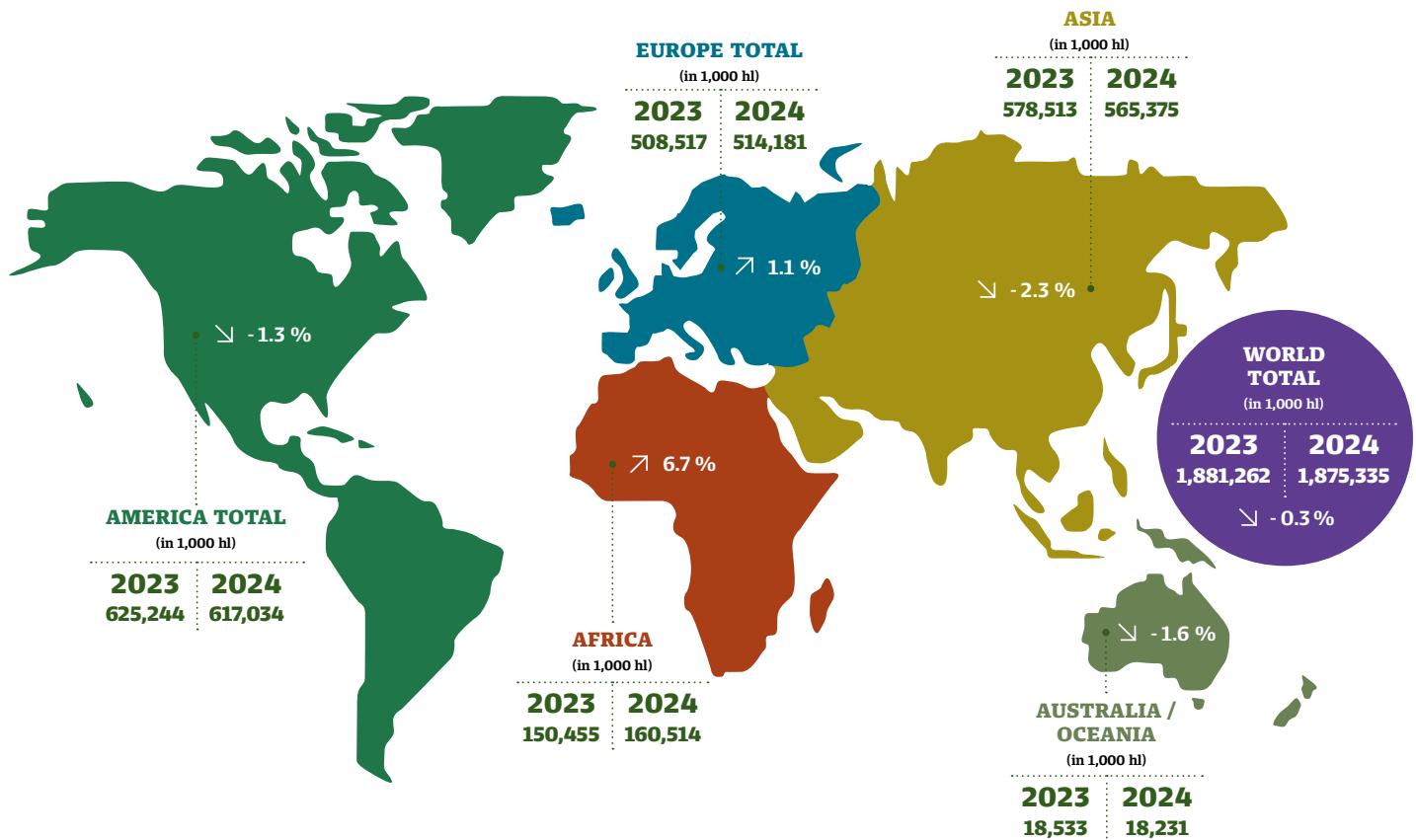
WORLD

| | 2023 | 2024 |
|--------------|------------------|------------------|
| TOTAL | 1,881,262 | 1,875,335 |



BEER PRODUCTION 2023/2024

DEVELOPMENT BY CONTINENT



| | 2023 1,000 hl | 2024 1,000 hl | 2023 +/- % rel. | 2024 +/- % rel. |
|---------------------------|------------------|------------------|--------------------|--------------------|
| European Union | 343,331 | 339,813 | -3.5 % | -1.0 % |
| Rest of Europe | 165,186 | 174,368 | 0.5 % | 5.6 % |
| EUROPE TOTAL | 508,517 | 514,181 | -2.2 % | 1.1 % |
| North America | 356,930 | 349,876 | -2.5 % | -2.0 % |
| Central America/Caribbean | 24,089 | 24,309 | 1.0 % | 0.9 % |
| South America | 244,225 | 242,849 | 0.8 % | -0.6 % |
| AMERICA TOTAL | 625,244 | 617,034 | -1.1 % | -1.3 % |

Following corrections to the 2023 beer output volumes in various countries, the volume brewed worldwide was 2.4m hl less than originally calculated.

In 2024, global beer production remained stable at just under 1.9bn hl, representing a slight decrease of 0.3% (6m hl) compared to 2023.

In Europe, the increase of almost 6m hl is due to production rising in **Russia** (7.4m hl) and the **United Kingdom** (1.9m hl) and falling in several **European Union** countries.

In the Americas, beer production declined once again, in this case by more than 8m hl. The decline was particularly

sharp in the **USA**, where output fell by 9.2m hl. **Brazil**, too, saw output fall by 1.5m hl. **Mexico**, on the other hand, posted an increase of 2.6m hl.

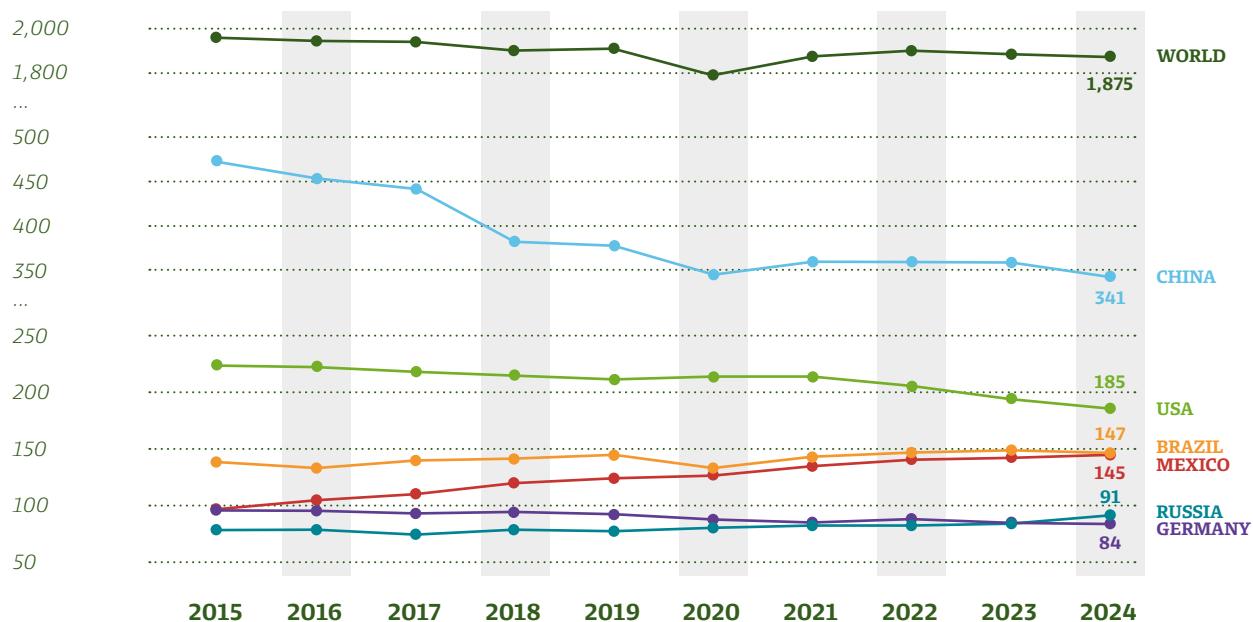
The decline by a total of 13m hl in Asia is primarily attributable to decreasing production volumes in **China** (18m hl), **Vietnam** (1.3m hl), and **Japan** (1.1m hl). In contrast, increases were recorded in **India** (3.4m hl), **Thailand** (1.8m hl), and **Cambodia** (1.0m hl).

After moderate growth in 2023, beer output in Africa increased by a further 10m hl in 2024. The countries mainly responsible for this growth were **Angola** (+4.2m hl), **South Africa** (+1.9m hl), **Nigeria** (+1.4m hl), and **Ethiopia** (+1m hl). In Australia/Oceania, output fell by 0.3m hl.



DEVELOPMENT IN THE YEARS 2015 - 2024

Beer production in million hl



TOP 10 BEER NATIONS

| Ranking | Country | Beer production 2024 | | World share in % |
|---------|----------------|----------------------|--|---------------------|
| | | in 1,000 hl | | |
| 1 | China | 341,000 | | 18.2 % |
| 2 | USA | 184,500 | | 9.8 % |
| 3 | Brazil | 147,418 | | 7.9 % |
| 4 | Mexico | 144,973 | | 7.7 % |
| 5 | Russia | 90,830 | | 4.8 % |
| 6 | Germany | 83,925 | | 4.5 % |
| 7 | Japan | 44,840 | | 2.4 % |
| 8 | Spain | 41,300 | | 2.2 % |
| 9 | South Africa | 37,000 | | 2.0 % |
| 10 | United Kingdom | 36,102 | | 1.9 % |
| 1 to 10 | | 1,151,888 | | 61.4 % |
| WORLD | | 1,875,335 | | 100.0 % |

Asia America Europe Africa

TOP 40 BREWERS

The positions of the first 11 in the rankings of the biggest brewing groups in 2024 remained unchanged year on year. A new arrival in 12th place is Baltika Breweries, the largest brewing group in the Russian Federation, which was part of the Carlsberg Group until the middle of 2023. Another newcomer to the top 40, in 24th place, is the Russian brewing group United Breweries (OPH), which formerly belonged to Heineken.

The 40 biggest brewing groups' share of global beer output fell from 1,649m hl to 1,639m hl, which represents a decline of 0.6 percent.

The major brewers are increasingly focusing on their flagship brands while disposing of craft beer breweries and

brands that they had once bought at high prices. The US-Canadian group MolsonCoors, for example, sold several of its US breweries, including the brands, to Tilray, as did AB-InBev a year earlier.

Diageo is continuing its disposal of shareholdings in Africa and is selling its 58.02 % stake in Guinness Nigeria PLC to Tolaram of Singapore. In strategic terms, brewers are increasingly transforming themselves into beverage manufacturers, investing more and more in adjacent categories, i.e. beverages that are not traditionally associated with beer. The Carlsberg Group, for example, has taken over the British soft drinks manufacturer BritVic, which is the UK market leader.



TOP 40 BREWERS

America

Europe

Asia

THE WORLD'S
TOP 40
BREWING GROUPS

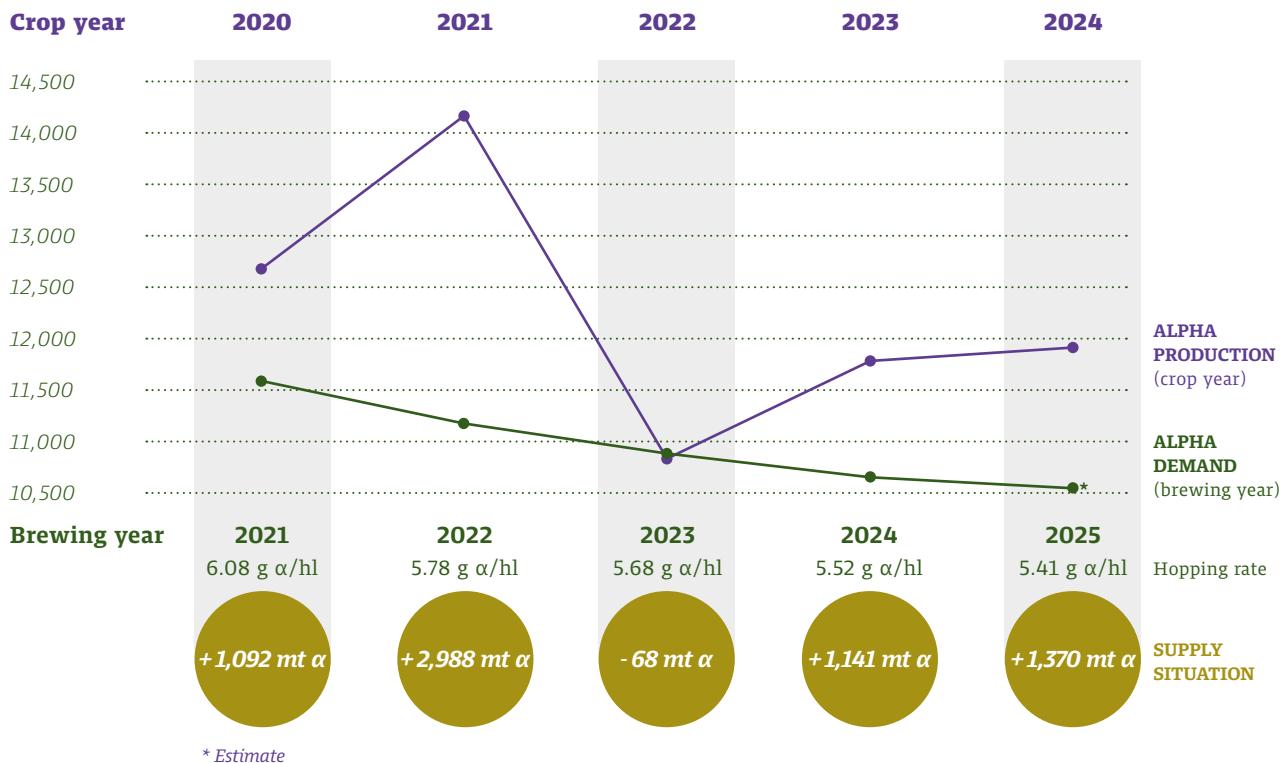
(as at December 31,
2024)

| Ranking | Brewery | Country | Beer output 2024 in mill. hl | Share of world beer production |
|-----------------------------------|----------------------------------|-------------|---------------------------------|-----------------------------------|
| 1 | AB InBev | Belgium | 495.49 | 26.4 % |
| 2 | Heineken | Netherlands | 240.70 | 12.8 % |
| 3 | China Res. Snow Breweries | China | 108.80 | 5.8 % |
| 4 | Carlsberg | Denmark | 101.20 | 5.4 % |
| 5 | Molson Coors | USA/Canada | 79.62 | 4.2 % |
| 6 | Tsingtao Brewery Group | China | 75.38 | 4.0 % |
| 7 | Asahi Group | Japan | 65.00 | 3.5 % |
| 8 | BGI / Groupe Castel | France | 44.00 | 2.3 % |
| 9 | Yanjing | China | 40.00 | 2.1 % |
| 10 | Efes Group | Turkey | 38.70 | 2.1 % |
| 11 | Constellation Brands | USA | 35.00 | 1.9 % |
| 12 | Baltika | Russia | 23.60 | 1.4 % |
| 13 | Diageo (Guinness) | Ireland | 22.95 | 1.2 % |
| 14 | Kirin | Japan | 22.90 | 1.2 % |
| 15 | Grupo Petrópolis | Brazil | 20.00 | 1.1 % |
| 16 | San Miguel Corporation | Philippines | 18.00 | 1.0 % |
| 17 | CCU | Chile | 16.48 | 0.9 % |
| 18 | Grupo Mahou - San Miguel | Spain | 15.90 | 0.8 % |
| 19 | Singha Corporation | Thailand | 14.72 | 0.8 % |
| 20 | Pearl River | China | 14.39 | 0.8 % |
| 21 | Saigon Beverage Corp. (SABECO) | Vietnam | 13.70 | 0.7 % |
| 22 | Damm | Spain | 12.65 | 0.7 % |
| 23 | Radeberger Gruppe | Germany | 10.40 | 0.6 % |
| 24 | OPH United Breweries | Russia | 9.50 | 0.5 % |
| 25 | Beer Thai (Chang) | Thailand | 9.00 | 0.5 % |
| 26 | Suntory | Japan | 8.41 | 0.4 % |
| 27 | Sapporo | Japan | 8.16 | 0.4 % |
| 28 | TCB Beteiligungsgesellschaft mbH | Germany | 7.50 | 0.4 % |
| 29 | Swinkels Family Brewers | Netherlands | 7.30 | 0.4 % |
| 30 | Paulaner Gruppe | Germany | 6.61 | 0.4 % |
| 31 | Oettinger Gruppe | Germany | 6.60 | 0.4 % |
| 32 | Krombacher Gruppe | Germany | 5.94 | 0.3 % |
| 33 | Bitburger Braugruppe | Germany | 5.78 | 0.3 % |
| 34 | HiteJinro | South Korea | 5.40 | 0.3 % |
| 35 | Olvi Group | Finland | 5.30 | 0.3 % |
| 36 | Estrella de Galicia | Spain | 5.30 | 0.3 % |
| 37 | Royal Unibrew | Denmark | 5.00 | 0.3 % |
| 38 | Martens | Belgium | 4.80 | 0.3 % |
| 39 | Polar | Venezuela | 4.75 | 0.3 % |
| 40 | Financière ACP | France | 4.20 | 0.2 % |
| TOTAL | | | 1,639.13 | 87.4 % |
| WORLD BEER PRODUCTION 2024 | | | 1,875.34 | 100.0 % |

The data were taken from the brewers' own annual reports. In other cases, after different sources had reported differing figures, or where no figures were available, the production volume had to be estimated.



ALPHA ACID BALANCE



Retrospective adjustment of beer output volume in 2023 led to a minor correction in the supply situation stated in our 2023/2024 report.

Our forecast of stable beer output accompanied by falling alpha demand proved to be accurate. While beer production in 2024 declined by only 0.3 percent, the hopping rate fell by almost two percent. As a result, the alpha acid balance once again shows overproduction of more than 1,100 mt.

In the 2025 brewing year we expect beer output to remain stable while the hopping rate continues to fall. Taking hop production volume in crop year 2024 into account, this will lead to a further alpha surplus.

Demand for uses beyond brewing has been taken into consideration in our calculation of the alpha supply situation.



MARKET SITUATION



In crop year 2024, hop acreage worldwide decreased by 4,630 ha (-7.7 %), most of which was seen once again in the USA (-4,032 ha or -18 %). In Germany, acreage was reduced by only 340 ha (-2 %), making Germany the world's biggest hop producer again in terms of both acreage and production volume.

World crop volume amounted to 113,528 mt of cone hops, 3.9 % less than in crop year 2023. Thanks to good alpha values, however, the volume of alpha acid produced rose by 119 mt to 11,912 mt.

Global beer production saw only minimal decline of roughly 6m hl (-0.3 %) in 2024 (after correcting several countries' figures for 2023), taking total output to 1,875m hl. Additionally, the hopping rates were declining, which led to a one percent lower hop demand (10,542 mt Alpha).

The trend toward mainstream beers and alcohol-free and low-alcohol variants continued in 2024 and in fact gained further momentum. This partly explains the decline in the average hopping rate per hectoliter. A decline in average hop dosage can be seen even in the craft beer segment – due partly to the increasing use of efficient hop products and partly to a change in styles, with a move toward traditional bottom-fermented beer styles requiring only moderate hop addition. This development is not only evident in the USA, but is emerging as an international trend.

The market thus remains structurally oversupplied and the hop industry is struggling with surpluses of hops that have largely been forward-contracted, but have not been used. Further acreage reduction is essential if the market is to return to equilibrium. This reduction is therefore expected worldwide in crop year 2025 and in Germany particularly in crop year 2026, as many forward contracts there are due to expire with the 2025 harvest, bringing forward contract coverage down from 83 % to 63 %.

In addition to the trend toward lighter beers, other factors are contributing to the fall in hop demand particularly in the traditional beer nations among the western industrialized countries. These include aging populations, new consumer trends combined with a significantly greater variety of beverages, and not least a decline in purchasing power due to economic weakness in an inflationary environment. There is a risk that rising geopolitical tensions and trade disputes initiated by the USA will further depress consumer sentiment and increasingly complicate international trade.

The market environment remains extremely challenging, with weakening demand from a brewing industry that has become increasingly cost-conscious and eager for low market prices on the one hand and rising production costs due to energy, material, and labor cost inflation on the other. Both the growers and the marketers are under enormous economic pressure. A noticeable decline in the number of production entities is to be expected.



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DEPENDABILITY IN TIMES OF CRISIS

Quality, product safety, and sustainability have been the basis for our company's success for over 230 years.

Our company has often faced uncertain times over the course of its centuries-long history. Thanks to an uncompromising quality policy, close personal contacts with our hop growers and brewery customers, and dedication to sustainable business practices, BarthHaas has always been able to survive these times of crisis.

As early as in 1999, BarthHaas introduced an ISO quality management system which it has continuously developed and expanded, particularly in the areas of food safety and environmental certification. Since 2018, our quality management has been supported by a state-of-the-art software system that ensures efficient and transparent documentation of all processes. One year later, BarthHaas established its Global Quality Group, in which the quality teams of all Group companies meet regularly with the aim of aligning their quality systems on a consistently high level.

Product safety is an integral part of the BarthHaas quality promise. The most important component is the BarthHaas 100% test guarantee, unique in the hop industry. As practiced since 2012, all the hops purchased are combined into blending samples according to precisely defined parameters and analyzed for possible pesticide residues. Only after the results of the analysis have been received are hops released for processing or marketing.

Over the last few decades, more and more countries have introduced their own maximum residue levels that often differ from those specified in the hop-producing countries. The BarthHaas test guarantee and the BarthHaas plant protection calendar, which was exclusively introduced 25 years ago, constitute a decisive instrument for classifying our hops and hop products with legal certainty for all sides for the respective markets.

Sustainable business practices are central to our company philosophy. The fact that BarthHaas has remained competitive over eight generations as a family-owned company is clear proof of this. Since 2010, our wide-ranging efforts regarding sustainability have been presented in structured form and published in what was then the hop



industry's first sustainability report. In 2021, the efforts of all the companies in our Group to prepare the Group to be sustainable in its economic, environmental, and social activities for the next generation, too, were presented for the first time in a global sustainability report. With the switch to renewable energy sources at our pelletization and processing plants in the Hallertau region in the last fiscal year, we passed a significant future-focused milestone on the path to possible climate neutrality.

Over the past decades, BarthHaas has made extensive efforts toward setting standards in the areas of quality, product safety, plant protection, and sustainability. Our commitment and continuous improvement in all these areas are reflected in high levels of customer satisfaction and in our company's sustainable development.

Through the establishment of two global coordination roles for sustainability and plant protection staffed with recognized experts, as well as the planned reorganization of the European quality management function under new leadership, we are on track for a successful, secure future for the benefit of our employees, growers, and customers – even in uncertain times!



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**Our thanks go to all those bodies and individuals who provide us with information
and thus contribute to the success of the BarthHaas Report.**