



THE BARTH REPORT



HOPS 2007/2008

BARTH-HAAS GROUP

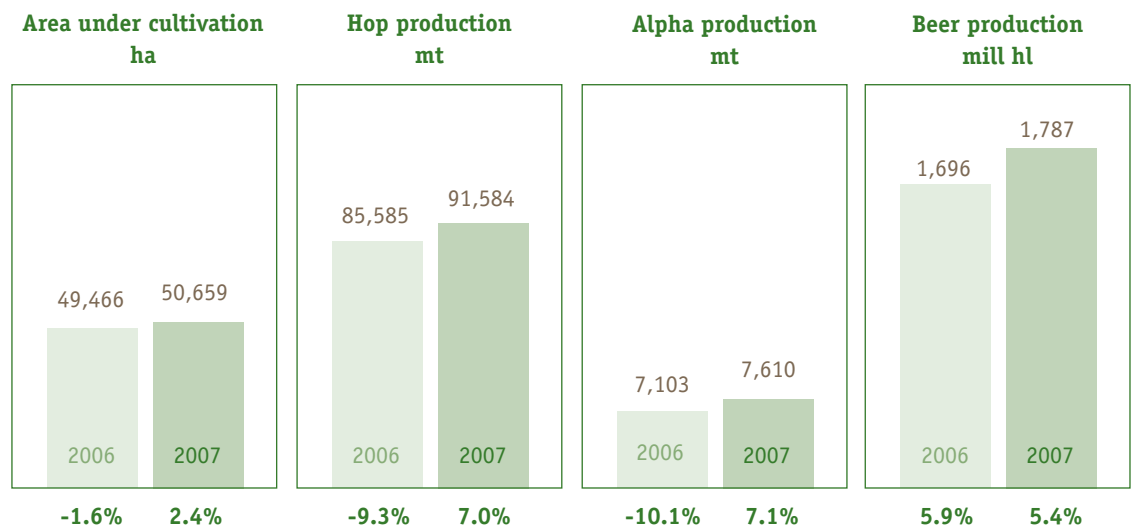


CONTENTS

World Market Key Data	2	Country Reports 2007 Crop/Rest of Europe	
Foreword	3	Ukraine	22
Political Situation	4	Russia	22
European Union	4		
Economic Situation	6	Country Reports 2007 Crop/America	
Key Data of the USA, Japan, Germany and China	6	USA	23
World Beer Production 2006/2007	7		
Output Development	8	Country Reports 2007 Crop/Asia	
Market Analysis	8	China	26
Forward Contract Rates	9		
Development 1996 – 2007	10	Country Reports 2008 Crop/Africa	
Hop Acreage and Production 2006/2007	12	South Africa	27
Alpha Acid Production/Alpha Acid Balance	13		
		Country Reports 2008 Crop/Australia/Oceania	
Country Reports 2007 Crop/European Union		Australia	28
Germany	14	New Zealand	29
Czech Republic	18		
Poland	18	Plant Development 2008	29
Slovenia	19	Outlook 2008	30
England	20	Barth-Haas Group awards research grants	30
France	20	Conversion Table	31
Spain	21	Currency Exchange Rates	31
Slovakia	21	Barth-Haas Group	31
		Top 40 Brewery Groups	32



WORLD MARKET KEY DATA



Source material from all over the world was required to produce this report.
We would like to thank all those who provided us with information.



Stephan J. Barth

Managing Partner, Joh. Barth & Sohn GmbH & Co. KG

Green gold

The description of hops as “green gold” probably came into common usage as a result of the record prices following the 1949 hop harvest. This expression has been used again and again ever since – although often erroneously, because for many years the hop growers’ revenues did not even cover their production costs or only just enabled them to break even. Today the term “green gold” is experiencing a renaissance and can certainly stand up to comparison with gold as a commodity.

What has happened? Production volume in crop years 2006 and 2007 was not nearly sufficient to meet the requirements of the brewing industry and prices rose many times over because the stocks in the brewers’ warehouses had already been largely depleted in the

years before. Despite continually rising prices, demand for hops remained consistently high and could not be satisfied. The industry was thus plunged into a full-blown state of emergency. The market prices for crop 2007 reached hitherto unthinkable and unprecedented heights.

Extreme situations demonstrate the value of a supplier who keeps his word and fulfils his contractual obligations, no matter how high the market price may be. It has always been a question of principle for the Barth-Haas Group to honour existing contracts. In crop year 2007 likewise our actions were governed by this maxim. However, we faced many obstacles. Production volume was disappointing in the USA and Slovenia in particular, but also in Germany among the high alpha Hallertau Magnum hops. This was caused by unfavourable weather conditions shortly before or during the harvest and by a certain reluctance to deliver on the part of large numbers of our Eastern European hop suppliers who, despite long-standing forward contracts, were unable to resist the temptation of exorbitantly high spot market prices or who, like the hop growers in the Czech Republic, simply had economic difficulties to contend with. These contracts proved to be virtually worthless. It even happened that processed hop products were stolen on their way to the customer.

The brewing industry used to acknowledge the importance of service and contractual reliability by placing significant long-term forward contracts with suppliers who were committed to these criteria.

Crop year 2007 finally reminded brewers, regardless of the league they played in terms of size, just how important it was to secure the supply of raw materials and how seriously this had been neglected in recent years.

Hops have been recognised once again as an indispensable strategic raw material. For that reason alone, the term “green gold” is a worthy description of this plant.



POLITICAL SITUATION

As in the years before, events in the **Middle East** were at the forefront of attention. Despite numerous initiatives, the prospect of a peaceful settlement between Israel and the Arab-Islamic world is as distant as ever. In **Iraq**, the violent confrontation between the different groups continues despite US military presence. The dispute between the **UN** and **Iran** also continued. In March 2008 the Security Council tightened sanctions against Iran because of that country's nuclear programme.

In May 2008 **Lebanon** experienced the worst unrest since the civil war of 1975–90. The unrest was triggered by a general strike organised by the Hezbollah Shiite militia and directed against the pro-Western cabinet of Prime Minister Siniora. In the meantime an agreement has been reached and a Muslim, Michel Suleiman, has been elected as the new head of state.

Despite the presence of international peace-keeping forces in **Afghanistan**, the country was afflicted more and more by suicide bombings and kidnappings which disrupted reconstruction efforts.

In **Myanmar** (Burma) there were protests against the military government in September 2007. Buddhist monks began a nationwide resistance campaign. The uprising was put down bloodily. On 3.5.2008, Hurricane Nargis caused serious damage and a high number of casualties.

The province of Sichuan in Southwest **China** was affected by multiple serious earthquakes causing significant casualties among the population and damage to property.

In **Pakistan**, Pervez Musharraf won the presidential election, but stood down as military ruler.

As of February 2008 the number of states in Eastern Europe has increased by one. On 17.2.2008, the parliament in Pristina declared Kosovo's independence from Serbia. The new nation is called the **Republic of Kosovo** and is the seventh state to emerge from the former Yugoslavia.

In **Russia** the constitutional transfer of presidential power from President Putin to Dmitry Medvedev took place on 7.5.2008. One day later the Russian parliament elected Vladimir Putin prime minister.

Silvio Berlusconi's coalition succeeded in winning by a large majority the parliamentary elections in **Italy** in January 2008.

In **Zimbabwe**, the ruling party Zanu-PF, led by Robert Mugabe, lost its majority in parliament. Whether this means a new departure for this long-suffering country remains open to question.

The whole world is watching the election campaign for the **US** presidential election in November 2008 with great interest.



EUROPEAN UNION (EU)

EU enlargement

In April 2008 the European Union and **Serbia** signed a stabilisation and association agreement as a first step towards Serbia's accession to the EU. The agreement will not take effect until the EU governments "unanimously find that the Republic of Serbia is cooperating fully with the International War Crimes Tribunal".

EU reform treaty

In 2007, during the German presidency of the EU Council an EU reform treaty was negotiated and signed by the heads of government and state in Lisbon in October. The **Treaty of Lisbon** is intended to make the European Union better able to reach decisions and to act. In order that the reform treaty, which replaces the failed EU constitution, can come into effect on 1.1.2009, it has to be ratified by the 27 member states. There are different procedures for this, depending on national law. Up to now the only country in which a referendum is planned is Ireland. By the end of May 2008 14 states had ratified the Treaty of Lisbon.

EU currency union

The European currency was introduced in **Malta** and **Cyprus** on 1.1.2008.

In **Latvia**, the introduction of the euro also planned for this date had to be postponed to 2009 or 2010 due to the country's persisting inflation. This means that the euro is legal tender in 15 countries out of the 27 EU member states. They are: **Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovenia, Spain** and **Cyprus**.

Reforms of the Common Agricultural Policy – The common market organisation for hops is replaced by a common organisation for the agricultural markets

On 11.6.2007 the agriculture ministers of the EU agreed to the European Commission's proposal to introduce a single common market organisation (CMO) for all agricultural products, thus replacing the 21 previously existing CMOs. The aim of the creation of a single CMO is to streamline legal regulations and make them more



transparent, so that the measures are more accessible. The creation of this single CMO applying to all agricultural products would constitute the most significant technical simplification of the Common Agricultural Policy (CAP) to date. The introduction of the new CMO allows nearly 50 Commission directives to be abolished: Whereas previously 650 articles were necessary to regulate the individual agricultural sectors, 200 will suffice in the future.

As of 1.7.2008, the new Council Regulation (EC) No. 1234/2007 for the common organisation of the agricultural markets of 22.10.2007 will also apply to hops. It will then replace Council Regulation (EC) No. 1952/2005 of 23.11.2005 which applied to the common market organisation for hops and will cease to be effective as of 1.7.2008. However, the existing regulations in the hop market organisation have largely been retained in the new CMO, in particular the provisions regarding the certification of hops and hop products and also the regulations affecting producers' associations. Since the Commission Directive (EEC) No. 1351/72 regarding the recognition of producers' associations in the hop sector had been amended several times and in major points, it seemed advisable to reform this directive for reasons of clarity. On 6.11.2007 a new version of Regulation (EC) No. 1299/2007 regarding the preconditions for the recognition of producers' associations in the hop sector was passed by the Commission. The old directive (EEC) No. 1351/72 was annulled at the same time.

The European Commission published its proposals for a simplification and further modernisation of the Common Agricultural Policy on 20.11.2007. Building on the reforms enacted in 2003 and the experience gathered since then, the so-called "Health Check" of the CAP is designed to improve the way in which the policy functions, thus enabling it to respond better to the challenges and opportunities presented by a Union which by 2007 had 27 members. Although the reforms have led to a modernisation of the CAP, it is the Health Check that is meant to be seen as an outstanding means whereby further progress can be made in the agricultural policy.

Here, there are three central questions:

1. How can the regulations regarding the granting of farm payments be made more effective and simplified?

2. How can the market support instruments that were originally conceived for a community of six member states be sensibly redesigned for today's world?
3. How can new challenges – from climate change to organic fuels and water resource management, to biodiversity protection – be overcome?

In the spring of 2008 the Commission submitted proposals to the legislature in the hope that they could be approved by the agricultural ministers of the member states by the end of 2008 and then immediately come into effect. The Health Check is to be seen as a preparatory measure for the Commission's concept for reviewing the budget for 2008/2009. It is intended to serve the purpose of "fine-tuning" the reforms of 2003 and to contribute to the discussion of the future focus of the agricultural sector.

Changes in plant protection policy in the EU have an impact on hop production and marketing in Europe

A major step towards the standardisation of hop marketing and hop products was taken in the form of Regulation (EC) No. 396/2005. This regulation requires that by the end of this year at the latest all effective agents in pesticides relevant to European hop farming today will be labelled with harmonised maximum residue levels. This will lead to considerable simplification of the hop trade within the EU member states.

In addition, the Council and the European parliament are discussing a "Pesticide Pact" that contains a number of guidelines and regulations concerning the use of pesticides, including the circulation of pesticides, environmental regulations for spraying equipment and environmental quality standards with regard to water policy. However, what will have by far the greatest impact on European hop farming is the "Directive regarding a community-wide thematic strategy on the sustainable use of pesticides" which is currently still being drawn up. A source of concern to European hop growers is above all the plan for quantitative and qualitative reduction targets for the use of pesticides, which will lead to a further restriction of what is already a limited range of pesticides available for hop growing. The adoption of this directive is planned for January 2009.

ECONOMIC SITUATION

In 2007, **gross domestic product (GDP)** worldwide grew by 3.6 %, compared to 3.8 % the year before. While lower growth was seen among the industrialised nations, disproportionately high growth was recorded once again in **Asia**, particularly in **China**, and in **Latin America**.

In the second half of 2007 the world economy began to slow noticeably. The international financial system found itself under pressure due to the **banking crisis** sparked by the US real estate market. What began in 2007 as a property crisis in the USA in the sub-prime mortgage sector developed into a financial crisis and a crisis of confidence of international proportions as a result of the repeated resale and repackaging of these mortgages in derivative products.

On 23.4.2008 the euro reached an exchange rate of 1.6006 USD, its highest level since its introduction on the financial markets in 1999. Its lowest value during the period under review was 1.3371 USD, recorded on 17.8.2007. The exchange rates are influenced in part by the interest rate decisions of the European Central Bank (**ECB**) and the US Federal Reserve (**FED**). While the FED lowered the prime rate in seven stages from 5.25 % to 2 % mainly because of the serious property crisis in the USA, the ECB refused to slacken the monetary reins, pointing to potential inflationary risks. The ECB interest rate has remained unchanged at 4 % since June 2007.

Although the stock markets largely defied the worsening climate in the second half of 2007, they began a headlong descent in January 2008. On 11.10.2007, the **Dow Jones** index reached 14,198 points, the highest level ever recorded in the New York stock exchange's history. On 23.1.2008 it stood at 11,644 points, its lowest level in the period under review. Germany's **Dax** index of leading shares reached the record level of 8,151 points on 13.7.2007. Dragged down by the finance crisis, it closed on 17.3.2008 at 6,167 – its lowest level since December 2006.

Our constantly growing appetite for energy is driving up the **oil price** and fuelling inflation. Economic and currency stability in general is under threat. At the end of May 2008 the price of crude oil reached an all-time high. It passed the 130-dollar mark per barrel of Brent crude, thus doubling in price since 2005 and in fact more than quadrupling since 2002. Consequently, electricity and gas prices have also risen sharply.

Additional inflationary pressure continues to come from the rising prices in nearly all raw material and foodstuff markets, resulting from the rising standard of living, welcome as it is, in the highly populated countries of the former Third World. This development produces progress and suffering at the same time, i.e. a growing gap between rich and poor countries.

KEY DATA

USA, JAPAN, GERMANY AND CHINA

		GDP growth (real) in %	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	2005	3.1%	-754.8	-767.5	3.4%	4.29%	5.1%
	2006	2.9%	-811.5	-817.3	3.2%	4.79%	4.6%
	2007	2.2%	-752.5	-790.1	2.9%	4.63%	4.6%
Japan	2005	1.9%	165.8	79.1	-0.3%	1.36%	4.4%
	2006	2.4%	170.6	67.9	0.2%	1.73%	4.1%
	2007	2.0%	212.3	91.7	0.1%	1.65%	3.8%
Germany	2005	1.0%	144.9	196.6	1.6%	3.35%	11.7%
	2006	2.9%	177.5	199.5	1.6%	3.76%	10.8%
	2007	2.5%	252.1	271.9	2.3%	4.22%	9.0%
China	2005	10.4%	160.8	101.9	1.8%	6.12%	4.2%
	2006	11.1%	250.0	177.5	1.5%	6.51%	4.1%
	2007	11.5%	336.7	262.0	4.8%	7.38%	4.0%

The figures for 2005 and 2006 have been revised according to the latest statistics

*) Interest rate for 10-year bonds. China: interest for long-term credits.

WORLD BEER PRODUCTION 2006/2007



Europe

Country	2006	2007
Russia (CIS)	99,900	116,000
Germany	107,174	105,000 *
United Kingdom	53,763	50,511
Poland	32,500	35,500
Spain	33,600	34,350
Ukraine (CIS)	26,730	31,561
Netherlands	26,479	27,259
Czech Republic	19,800	19,897
Romania	17,487	19,422
Belgium	18,383	18,565
France	16,030	15,096
Italy	12,055	13,520
Ireland	9,377	9,270
Turkey	9,059	9,205
Austria	8,818	9,044
Portugal	8,359	8,191
Denmark	8,175	8,042
Hungary	6,930	6,500 *
Serbia	5,878	6,067
Bulgaria	5,228	5,686
Finland	4,548	4,547
Greece	3,850	4,150
Sweden	4,006	4,011
Slovakia	3,795	3,683
Belarus/White Russia (CIS)	3,320	3,550
Switzerland	3,494	3,508
Croatia	3,515	3,380
Latvia	2,960	3,066
Norway	2,497	2,552
Slovenia	1,905	1,905
Lithuania	1,510	1,519
Estonia	1,270	1,280
Bosnia-Herzegovina	1,004	961
Moldavia	845	933
Albania	700	755
Macedonia	670	695
Georgia (CIS)	700	600
Montenegro	573	585
Cyprus	380	398
Armenia (CIS)	400	350
Luxembourg	338	330
Iceland	174	175 *
Malta	105	110
Other CIS countries	300	100
TOTAL	568,584	591,829

Australia/Oceania

Country	2006	2007
Australia	17,200	16,770
New Zealand	3,690 *	3,800 *
Papua-New Guinea	500	600
Tahiti	185	185
Fiji Islands	157	155
New Caledonia	132	133
Samoa	75	80
Solomon Islands	46	58
Tonga	8	8
Vanuatu	7	7
TOTAL	22,000	21,796

America

Country	2006	2007
USA	231,161	233,746
Brazil	93,600 *	96,000 *
Mexico	78,162	81,000
Venezuela	24,000 *	26,249
Canada	23,636	23,923
Columbia	18,400 *	19,000 *
Argentina	14,000 *	14,500 *
Peru	7,962	9,236
Chile	5,484	5,680
Ecuador	3,500 *	3,600 *
Dominican Republic	2,800 *	3,000 *
Cuba	2,298	2,504
Panama	1,800 *	1,800 *
Guatemala	1,600 *	1,600 *
Costa Rica	1,500 *	1,600 *
Bolivia	1,700 *	1,500 *
Paraguay	1,500 *	1,500 *
Honduras	950 *	950 *
Jamaica	900 *	950 *
Uruguay	850 *	900 *
El Salvador	800 *	800 *
Nicaragua	700 *	700 *
Puerto Rico	600 *	700 *
Trinidad	350 *	350 *
Guyana	300 *	300 *
Belize	200 *	250 *
Bahamas	140 *	140 *
Dutch Antilles	130 *	140 *
Surinam	95 *	95 *
Haiti	80 *	80 *
Barbados	80 *	80 *
St. Lucia	70 *	70 *
Martinique	60 *	60 *
St. Vincent	55	48
Grenada	35 *	37 *
Antigua	26	26
St. Kitts	17 *	20 *
Aruba	16 *	16 *
Dominica	18	14
Cayman Islands	4 *	4 *
TOTAL	519,579	533,168

Asia

Country	2006	2007
China	351,515	393,137
Japan	62,980	62,804
Thailand	20,209	21,700
Vietnam	16,000	18,000
South Korea	16,436	17,886
Philippines	13,210	13,600 *
India	8,410	9,000 *
Kazakhstan (CIS)	3,640	4,090
Taiwan	4,084	3,956
Malaysia	1,500 *	1,800 *
Uzbekistan (CIS)	1,400	1,600
Indonesia	1,420 *	1,580 *
Laos	1,062	1,279
Singapore	1,104	1,140
Israel	825	825
Cambodia	560	700
Aserbaidjan (CIS)	400	550
Myanmar (Burma)	400 *	500 *
Sri Lanka	469	468
Nepal	250	277
Lebanon	173	199
Hong Kong	225	170
Syria	100	111
Jordania	71	87
Mongolia	74	72 *
Pakistan	32	30 *
Iraq	0 *	0 *
TOTAL	506,549	555,561

Africa

Country	2006	2007
South Africa	26,550	26,530
Nigeria	11,500	13,500
Cameroon	4,398	4,580
Kenya	3,800	4,500
Angola	3,753	3,958
Tanzania	2,850	3,500
Dem. Rep. Congo (Zaire)	2,808	3,027
Ethiopia	2,421	2,560
Ghana	1,813	1,806
Uganda	1,551	1,725
Namibia	1,300	1,430 *
Ivory Coast	1,226	1,350
Mozambique	1,193	1,318
Burundi	1,231	1,281
Congo	936	1,128
Zimbabwe	1,157	1,119
Tunesia	1,036	1,100
Egypt	1,100	1,050
Morocco	925	1,000
Gabon	915	990
Madagascar	714	823
Algeria	760	710
Rwanda	665	710
Burkina Faso	650	680
Zambia	535	561
Benin	470	505
Botswana	473	452
Togo	346	420
Mauritius	345	345
Lesotho	290	310
Chad	230	270
Eritrea	288	223
Réunion	215	221
Swaziland	199	196
Senegal	185	195
Malawi	190 *	190 *
Guinea	122	160
Central African Republic	124	136
Liberia	94	111
Sierra Leone	90	90
Mali	80	86
Niger	61	61
Seychelles	60	60
Guinea Bissau	42 *	45 *
Gambia	36	37
Cape Verde Islands	20 *	12 *
TOTAL	79,747	85,061

WORLD TOTAL

	2006	2007
TOTAL	1,696,459	1,787,415

figures in 1,000 hl

in italics:

corrections for 2006

as stated in last year's report.

* estimate



OUTPUT DEVELOPMENT

As of 1.1.2007 Romania and Bulgaria are members of the EU.

	2006 1,000 hl	2007 1,000 hl	2006 +/- % rel.	2007 +/- % rel.
European Union	386,110	410,852	1.2%	6.4%
Rest of Europe	182,474	180,977	10.5%	-0.8%
Europe total	568,584	591,829	4.0%	4.1%
North America	254,797	257,669	0.3%	1.1%
Central America/Caribbean	93,691	97,239	6.7%	3.8%
South America	171,091	178,260	5.0%	4.2%
America total	519,579	533,168	2.9%	2.6%
Asia	506,549	555,561	11.0%	9.7%
Africa	79,747	85,061	9.0%	6.7%
Australia/Oceania	22,000	21,796	4.3%	-0.9%
WORLD TOTAL	1,696,459	1,787,415	5.9%	5.4%

In 2007 beer output rose by 5.4 %, or 91m hl, year on year and was once again above average. The output volumes stated for some countries in 2006 had to be revised, resulting in the figure in last year's report being corrected downward by 2.5m hl. Nevertheless, the growth in output in 2006 was still 5.9 %, which is significantly above the long-term average of 3 % (1997 – 2006).

China alone, with 46 %, recorded by far the largest share in international year-on-year output growth in 2007. In addition to many other tables, China takes first place among the world's beer nations. Its share of world beer production is an impressive 22 %.

Growth in **Europe**, totalling 23.2m hl, can be mainly attributed to output rising in Russia (16.1m hl) and Ukraine (4.8m hl), although the United Kingdom again had a negative effect on the figures, this time recording a minus of 3.3m hl.

In **America**, output growth in Mexico (2.8m hl), USA (2.6m hl), Brazil (2.4m hl) and Venezuela (2.2m hl) contributed to an increase of 13.6m hl.

Asia, and in particular China (+41.6m hl) and Vietnam (+2m hl), recorded a total increase of 49m hl.

The country with by far the largest share in the increase in beer output in **Africa** of 5.3m hl was Nigeria (+2m hl).



MARKET ANALYSIS

Crop year 2007 will go down in the history of the hop industry as the year of the turbo boom. The extent of the scarcity of hops and the resulting explosion in prices took the market participants at all levels by surprise. And yet this drama was structurally foreseeable. In the spring of 2007 it was already clear that the **supply bottlenecks** resulting from the high global growth in the brewing industry, and in the absence of any notable increase in acreage, were not to be resolved without an outstanding harvest in 2007. The hoped-for record harvest did not arrive.

Unfavourable climatic conditions in the month of August in the USA and Germany, the pacemakers and main suppliers of the world market, produced in some cases bitterly disappointing results among the high alpha varieties. Although the alpha levels and yields per hectare in Europe were higher than in 2006, in the USA, for example, they still remained significantly below the average. The harvest failed to live up to expectations in other countries, too. In early September, once it became clear what could be expected of the crop, spot markets began to develop quickly in every

hop growing country for the relatively small quantities of available hops compared with previous years. Consequently, farm-gate prices could only move in one direction – upwards. Spot price quotations everywhere orientated themselves to the farm-gate prices paid for German and US high alpha hops. The pressure on the market was further exacerbated by the **refusal of many Eastern European producers** to deliver the hops they had sold by forward contract to their contractual partners in the trade at the prices agreed. The reasons for this supply boycott were diverse and in hardly any cases legitimate.

With only a few minor exceptions, the global hop trading companies found their freedom of action severely curtailed by the chain of unfavourable circumstances described above. Their first priority was to ensure their ability to fulfil existing contracts with the brewing industry by means of expensive supplementary farm-gate purchases and, by mutual agreement, by switching varieties. It was not until the end of September that a clear picture emerged of the hop volume freely available to the market, at which point sales to the brewing

MARKET ANALYSIS



industry could begin. As a result of almost daily rises in farm-gate prices in October, uncertainty regarding the supply of Slovenian, Czech and Polish hops and the resulting non-fulfilment of trading contracts within the industry, selling **prices exploded**.

In January 2007, when the largest trading company in Slovenia declared itself bankrupt under dubious circumstances, presenting the market with the prospect of a further supply shortage of a considerable size, selling prices rose to more than 650 EUR per kilo of alpha for high alpha hops. They remained at that level for the rest of the marketing period. At the time of going to press there was little likelihood of any unsold hops remaining on the market. The market at all levels was already **sold out in spring 2008**, which was yet another novelty.

Once again, as in the previous year, the hop industry was overwhelmed by a wave of demand that it was unable to satisfy. Virtually no brewery and **virtually no hop growing country is unaffected** by the consequences of crop year 2007. Almost every brewery, regardless of its size, found itself facing the necessity to adapt existing recipes and/or, in the worst case, even to reduce its bittering rates, not to mention the financial effects.

The **after-effects for hop growing** will probably be even more serious. As a consequence of crop year 2006 and even more so, however, of the events in crop year 2007, the brewing industry has concluded forward contracts on an unprecedented scale mainly up to, but also beyond, crop year 2013. Hop growers in the USA will probably benefit most from the structural short-

fall in the supply of hops to the brewing industry and the resulting wave of forward contracts. For crop 2008, **US growers have planted a little more than 2,900 hectares** of new hop yards, mainly with high alpha varieties. The main expansion of world hop acreage in the USA has to be seen in the light of the favourable dollar exchange rate and the high yield potential per hectare even in the first year of growing the hops in completely irrigated conditions. On top of that, each newly planted hectare has already been sold on a long-term basis. The expected expansion of acreage in **Germany of approx. 1,000 hectares** is also covered by good long-term contracts.

Acreage in **China** has also been increased by up to **1,500 hectares**, which is urgently needed to meet demand from the domestic brewing industry.

As a consequence of the behaviour of the Eastern European growers and trading companies, virtually no forward contracts are likely to have been placed in their region. The historically favourable opportunity for farms and trading companies to obtain long-term security was sacrificed in these countries for the sake of short-term profit.

As a result of the global increase in acreage totalling nearly 6,000 hectares, a higher volume is expected to be harvested in autumn 2008 than in 2007. The increased occurrence of climatic conditions on a global scale makes for a higher risk to crops than in the past. This affects the bitter values in particular. Nevertheless, the entire hop industry is again hoping for a good harvest, so that a better balance may be achieved between production and demand.

FORWARD CONTRACT RATES



Forward contract rates in % (as per spring 2008)

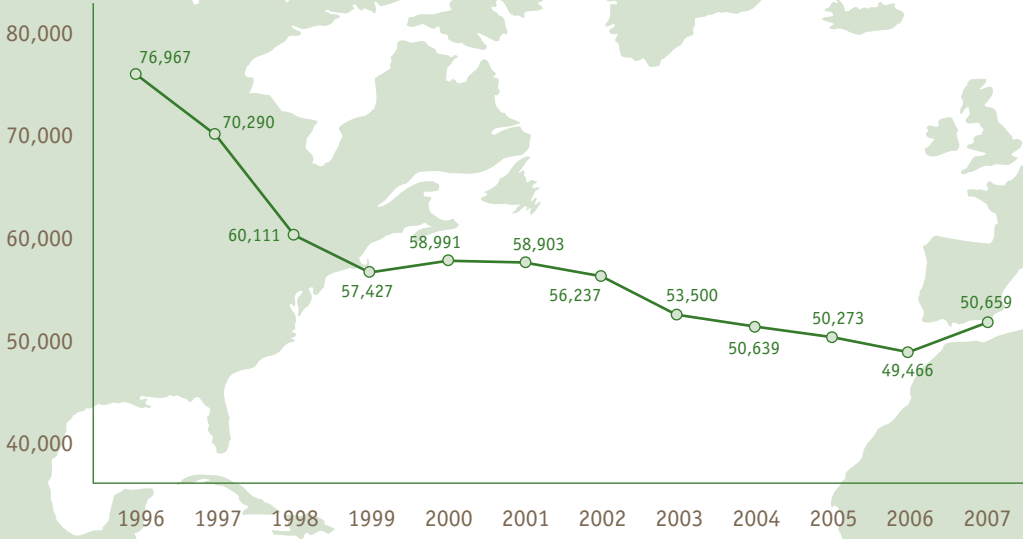
Country	2008	2009	2010	2011
Germany	95%	95%	90%	80%
USA	100%	100%	95%	80%
China	75%	75%	75%	75%
Czech Republic	100%	95%	90%	50%
England	80%	80%	70%	50%

The contract figures were calculated on the basis of the acreage expected to be farmed in 2008 and a long-term average yield.

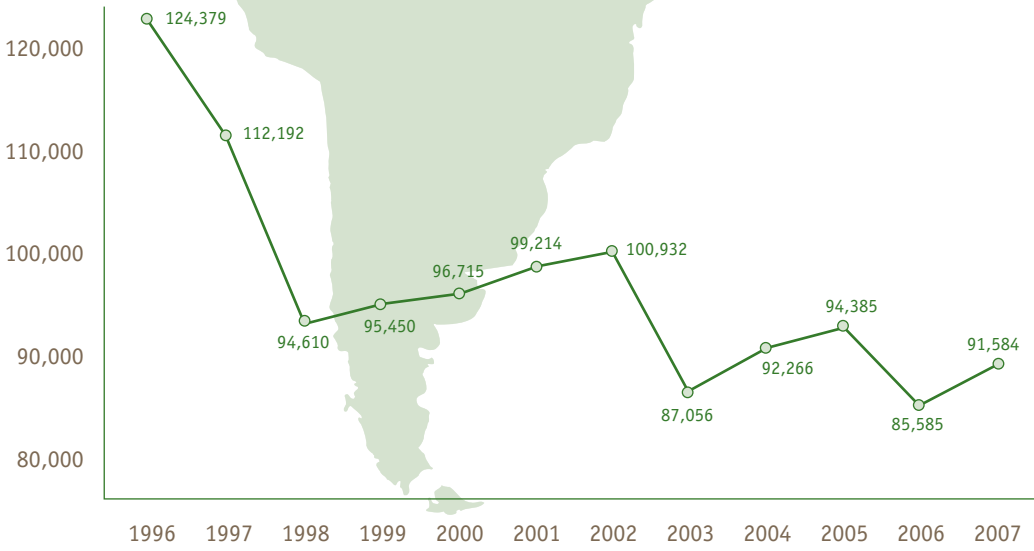
The figures presented show the willingness of the brewing industry on the one hand and the producers on the other to conclude forward contracts. The volume of forward buying in the main hop growing countries for the coming four years is at a historically high level

considering the time period. Due to the uncertainty of contract fulfilment in Slovenia any mention of forward contract volume is superfluous. There are no reliable data available from Poland.

AREA UNDER CULTIVATION HA

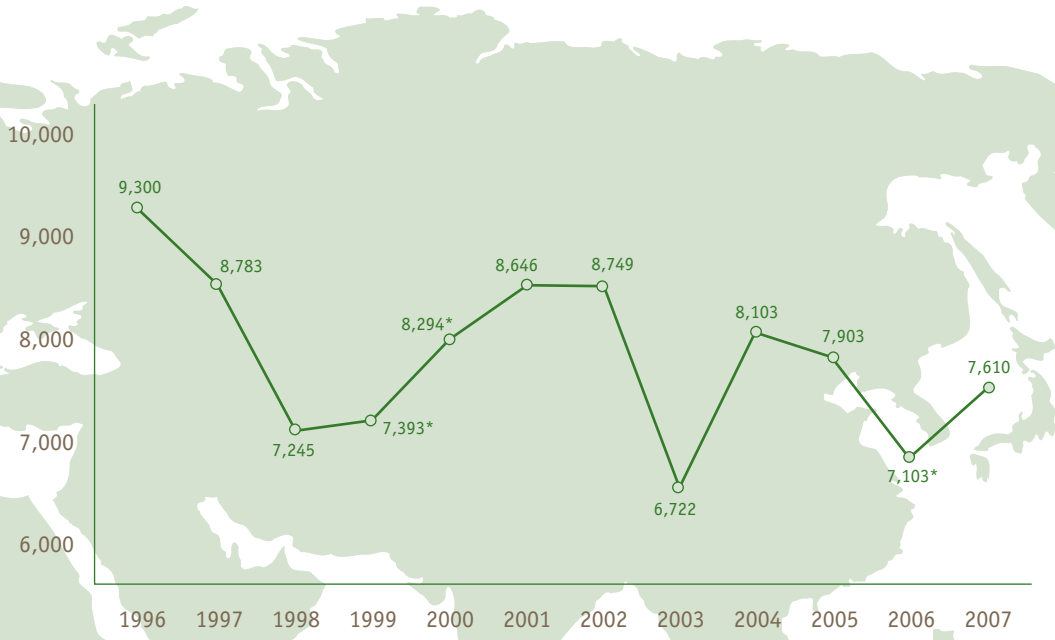


HOP PRODUCTION MT



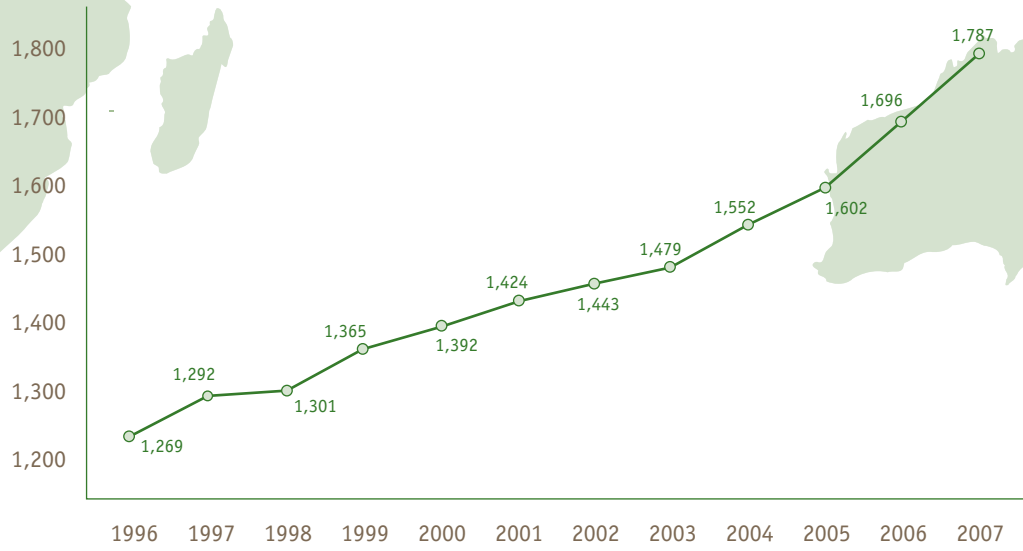


ALPHA PRODUCTION MT



** not taking into consideration the quantities destroyed in ware-house fires*

BEER PRODUCTION IN MILL HL





HOP ACREAGE AND PRODUCTION

		2006				2007				
		Acreage ha	Production mt	Ø-Alpha %	Alpha mt	Acreage ha	Production mt	Ø-Alpha %	Alpha mt	
* estimate	Germany	Hallertau	14,280	24,294.2	7.8%	1,905	14,754	27,200.8	8.6%	2,347
		Elbe-Saale	1,284	2,251.9	11.1%	249	1,321	2,698.3	11.8%	319
1) Accession to the European Union as of 1.1.2007		Tett nang	1,200	1,423.8	2.5%	36	1,193	1,613.7	4.3%	69
		Spalt	387	504.2	3.6%	18	384	588.2	4.7%	28
		Others	19	34.2	7.2%	2	19	38.0	6.6%	3
		Total	17,170	28,508.3	7.8%	2,210	17,671	32,138.9	8.6%	2,766
in italics: corrections for 2006 as stated in last year's report.	Czech Republic	Saaz	4,044	3,645.5	2.8%	103	4,006	3,891.8	3.6%	139
		Tirschitz	702	1,082.3	3.2%	34	702	1,025.6	3.8%	38
		Auscha	668	725.6	2.3%	17	681	713.2	3.1%	22
		Total	5,414	5,453.4	2.8%	154	5,389	5,630.6	3.5%	199
	Poland		2,234	2,888.9	6.0%	172	2,179	3,256.1	6.8%	221
	Slovenia		1,507	1,819.0	5.6%	102	1,570	1,987.0	5.7%	113
	England		1,043	1,340.3	6.7%	90	1,063	1,473.0	7.2%	107
	France		795	1,187.7	2.4%	28	796	1,480.4	3.2%	47
	Spain		530	1,135.0	11.0%	125	497	936.7	12.1%	113
	Romania 1)		-	-	-	-	429	196.0	7.6%	15
	Slovakia		305	314.0	2.8%	9	300	294.0	3.7%	11
	Bulgaria 1)		-	-	-	-	221	227.3	8.1%	18
	Austria		219	342.3	6.7%	23	206	349.9	6.3%	22
	Belgium		183	274.0	7.7%	21	176	320.0	9.9%	32
	Portugal		21	25.2	9.3%	2	21	27.0	11.0%	3
	Hungary		37	59.0	10.9%	6	18	18.8	10.5%	2
	European Union		29,458	43,347.1	6.8%	2,942.0	30,536	48,335.7	7.6%	3,669
	Ukraine*		1,464	1,473.0	4.0%	59	1,145	700.0	5.4%	38
	Turkey		331	356.0	9.0%	32	331	280.0	9.3%	26
	Russia		420	340.0	4.4%	15	228	158.0	4.5%	7
	Serbia		67	138.0	6.1%	8	67	111.0	7.9%	9
	Belarus/White Russia		30	26.0	9.0%	2	30	30.0	9.0%	3
	Switzerland		20	27.7	8.9%	2	18	36.5	8.8%	3
	Croatia		10	15.0	5.5%	1	16	24.0	5.5%	1
	Romania* 1)		400	400.0	6.0%	24	-	-	-	-
	Bulgaria 1)		221	275.0	9.3%	26	-	-	-	-
	Rest of Europe		2,963	3,050.7	5.5%	169	1,835	1,339.5	6.5%	87
	EUROPE		32,421	46,397.8	6.7%	3,111	32,371	49,675.2	7.6%	3,756
	USA	Washington	8,714	20,100.3	12.3%	2,476	9,205	21,140.1	11.2%	2,377
		Oregon	2,038	4,020.5	8.6%	345	2,133	4,328.7	8.2%	353
		Idaho	1,132	2,045.9	8.4%	171	1,172	1,861.9	8.7%	161
		Total	11,884	26,166.7	11.4%	2,992	12,510	27,330.7	10.6%	2,891
	Argentina*		167	290.0	7.6%	22	167	240.0	8.0%	19
	AMERICA		12,051	26,456.7	11.4%	3,014	12,677	27,570.7	10.6%	2,910
	China	Xinjiang	1,880	5,184.0	7.3%	381	2,101	5,827.0	6.0%	347
		Gansu	1,664	4,698.0	6.3%	297	2,005	5,568.0	4.9%	270
		Total	3,544	9,882.0	6.9%	678	4,106	11,395.0	5.4%	617
	Japan		235	415.1	5.8%	24	214	410.2	6.5%	27
	India		60	40.0	11.4%	5	62	42.5	11.1%	5
	ASIA		3,839	10,337.1	6.8%	707	4,382	11,847.7	5.5%	649
	South Africa		430	682.0	13.5%	92	434	900.2	13.0%	117
	AFRICA		430	682.0	13.5%	92	434	900.2	13.0%	117
	Australia		372	1,044.0	11.3%	118	441	890.0	12.2%	108
	New Zealand		353	667.1	9.1%	61	354	700.1	10.0%	70
	AUSTRALIA/OCEANIA		725	1,711.1	10.5%	179	795	1,590.1	11.2%	178
	WORLD		49,466	85,584.7	8.3%	7,103	50,659	91,583.9	8.3%	7,610
										Destroyed in a US warehouse fire
										-110
										Remaining alpha quantity
										6,993

ALPHA ACID PRODUCTION

Alpha acid production world-wide has been divided into variety groups:

GROUP I:	Fine aroma hops	such as Hallertau Mittelfrueh, Hersbruck Spaet, Klön 18, Lublin, Saaz, Saphir, SA-1, Spalt, Styrian Golding, Strisselspalt, Tettngang.
GROUP II:	Aroma hops	such as Aurora, Cascade, First Gold, Fuggles, Golding, Hallertau Tradition, Horizon, Mount Hood, NZ Hallertau, Perle, Spalt Select, Sterling, Willamette.
GROUP III:	Bitter hops/ High Alpha hops	such as Admiral, Chelan, Chinook, Cluster, Columbus/Tomahawk/Zeus (CTZ), Galena, Hallertau Magnum, Hallertau Taurus, Herkules, Kirin Flower, Marco Polo, Marynka, Millennium, Northern Brewer, Nugget, NZ Pacific Gem, Phoenix, Pride of Ringwood, Super Pride, Target, Tsingdao Flower, Victoria, Warrior.

Varieties with a long-term average alpha content of up to 4.5 %

Varieties with a long-term average alpha content of over 4.5 %

With the world hop crop divided into these groups, alpha acid production was as follows:

Group	2006					2007				
	Crop share	Crop mt	Alpha Ø	Alpha mt	Alpha share	Crop share	Crop mt	Alpha Ø	Alpha mt	Alpha share
I	17.0%	14,541	2.4%	347	4.9%	15.0%	13,774	3.0%	419	5.5%
II	26.3%	22,551	5.3%	1,186	16.7%	29.1%	26,664	5.9%	1,563	20.5%
III	56.7%	48,493	11.5%	5,570	78.4%	55.9%	51,146	11.0%	5,628	74.0%
TOTAL	100.0%	85,585	8.3%	7,103	100.0%	100.0%	91,584	8.3%	7,610	100.0%

Some minor corrections have been made to the crop and alpha volumes for 2006 contained in last year's report.

Alpha group I – fine aroma hops: Germany 43.7 % (previous year: 38.3 %), Czech Republic 29.4 % (previous year: 29.2 %).

Alpha group II – aroma hops: Germany 55.7 % (previous year: 46.8 %), USA 21.9 % (previous year: 29.3 %).

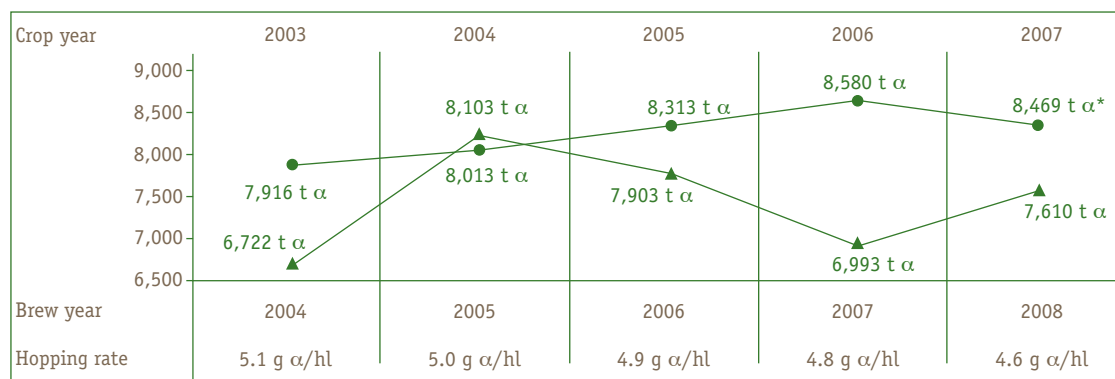
Alpha group III – bitter hops/high alpha hops: USA 45.3 % (previous year: 47.5 %), Germany 30.4 % (previous year: 27.3 %).

In crop year 2007 world alpha acid production increased by slightly more than 500 mt year on year.

In 2007, as in the previous year, fine aroma hops suffered in terms of production volume due to unfavourable weather conditions. The prevailing climatic conditions worldwide had an even more unfavourable effect on the high alpha varietal group.

Together, Germany and the USA produced 74.3 % of total world alpha in crop year 2007 (previous year 73.3 %). Although the USA's share declined, it remained the largest alpha-producing nation, with 38 % (previous year 42.1 %). Germany improved from 31.1 % in the previous year to 36.3 % in 2007, thus taking second place, followed by China with 8.1 %, down from 9.5 % the year before.

ALPHA ACID BALANCE



Alpha supply

Brew year	Surplus/Deficit
2004	-1,194 t α
2005	+90 t α
2006	-410 t α
2007	-1,587 t α
2008*	-859 t α

● Alpha demand (Brew year)
▲ Alpha production (Crop year)

* Estimated demand

The high alpha acid deficit forecast for the 2007 brewing year in last year's report turned out to be even higher than estimated. The estimate of beer output in 2007 was based on an average growth rate of 3 % per year over the last 10 years. In actual fact, however, beer production rose by 5.4 %. Although some 617 mt more alpha acid was available after the 2007 harvest compared with 2006, the total volume produced came nowhere near to meeting demand. For the third year in succession less alpha was harvested than was required. This amounted to a shortfall of more than 2,800 tons

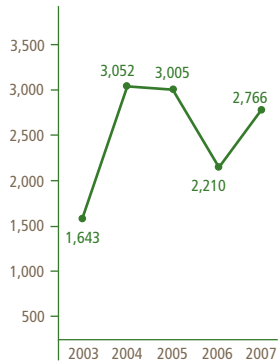
in the last three years. Once again breweries' stocks were used to make up for the shortfall, although they too are running low. Our estimates for the 2008 brewing year are again based on an increase in beer production of 3 %.

These statistics do not take into account the alpha degradation that occurs during the time between the processing of the hops and their use in the brewing industry or the approx. 200 mt of alpha required for use outside the brewing industry.



GERMANY

Alpha production in mt



Rounding differences of the acreage may cause differences in addition.

Area	Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
		2006	+/-	2007	2006	2007	2006	2007
Hallertau	Perle	2,931	103	3,034	1.55	1.98	4,548.41	6,010.80
	Hallertau Tradition	2,235	123	2,358	1.68	2.01	3,765.77	4,749.15
	Hallertau Mittelfrueh	1,516	78	1,594	1.38	1.07	2,085.66	1,708.73
	Hersbruck Spaet	865	-124	741	1.74	1.99	1,502.06	1,471.62
	Spalt Select	740	-7	733	1.83	2.26	1,351.89	1,654.48
	Saphir	191	-5	186	2.00	2.48	381.20	461.51
	Other Aroma	56	1	57	1.19	1.74	66.61	99.27
	Total Aroma	8,535	168	8,703	1.61	1.86	13,701.60	16,155.56
	Northern Brewer	395	-61	334	1.34	1.70	528.15	569.06
	Other Bitter	32	-1	31	2.16	2.43	69.27	75.32
	Total Bitter	427	-62	365	1.40	1.77	597.42	644.38
	Hallertau Magnum	3,549	-120	3,429	1.96	1.84	6,969.31	6,308.16
	Hallertau Taurus	1,146	-29	1,117	1.89	2.07	2,160.69	2,307.93
	Herkules	201	574	775	0.50	1.27	100.19	981.00
	Nugget	288	-37	251	1.90	2.39	548.29	598.77
	Hallertau Merkur	100	-17	83	1.68	1.86	168.14	154.35
	Other High Alpha	16	-7	9	1.39	1.86	22.31	16.74
	Total High Alpha	5,299	367	5,666	1.88	1.83	9,968.93	10,366.95
	Others	19	1	20	1.38	1.69	26.25	33.87
Total Hallertau	14,280	474	14,754	1.70	1.84	24,294.20	27,200.76	
Elbe-Saale	Perle	128	4	132	1.42	1.91	181.81	251.96
	Hallertau Tradition	38	0	38	0.74	1.13	28.07	42.95
	Other Aroma	0	0	0	0.00	0.00	0.00	0.37
	Total Aroma	166	4	170	1.26	1.74	209.88	295.28
	Northern Brewer	155	-18	137	1.20	1.92	185.99	263.70
	Total Bitter	155	-18	137	1.20	1.92	185.99	263.70
	Hallertau Magnum	831	-4	827	1.97	2.21	1,638.70	1,830.85
	Herkules	13	71	84	0.64	1.06	8.37	89.42
	Other High Alpha	111	-16	95	1.80	2.15	199.41	204.08
	Total High Alpha	955	51	1,006	1.93	2.11	1,846.48	2,124.35
Others	8	0	8	1.19	1.87	9.53	14.96	
Total Elbe-Saale	1,284	37	1,321	1.75	2.04	2,251.88	2,698.29	
Tett nang	Tett nang	754	6	725	1.15	1.30	863.69	945.16
	Hallertau Mittelfrueh	406	4	378	1.19	1.32	482.02	497.99
	Other Aroma	35	6	81	1.94	1.88	67.90	151.98
	Total Aroma	1,195	16	1,184	1.18	1.35	1,413.61	1,595.13
	High Alpha	5	4	9	2.04	2.06	10.19	18.56
Total Tett nang	1,200	20	1,193	1.19	1.35	1,423.80	1,613.69	
Spalt	Spalt Select	114	-3	111	1.44	1.99	164.71	220.75
	Hallertau Mittelfrueh	114	-5	109	1.18	1.32	134.45	143.73
	Spalt	89	2	91	1.08	1.16	96.06	105.95
	Other Aroma	57	0	57	1.50	1.67	85.68	95.04
	Total Aroma	374	-8	366	1.29	1.55	480.90	565.47
	High Alpha	14	4	18	1.66	1.26	23.26	22.69
Total Spalt	387	-3	384	1.30	1.53	504.16	588.16	
Rhen.-P./ Hochdorf	Aroma	14	2	16	1.81	1.89	25.37	30.17
	High Alpha	5	-2	3	1.77	2.60	8.84	7.80
	Total Rhenish./Hoch.	19	0	19	1.80	2.00	34.21	37.97
Total Aroma	10,284	156	10,440	1.54	1.79	15,831.36	18,641.61	
Total Bitter	582	-80	502	1.35	1.81	783.41	908.08	
Total High Alpha	6,277	424	6,701	1.89	1.87	11,857.70	12,540.35	
Total Others	27	1	28	1.33	1.74	35.78	48.83	
GERMANY TOTAL	17,170	501	17,671	1.66	1.82	28,508.25	32,138.87	



Farm Structure

In spite of the return of a more favourable market environment, the number of producers actively farming hops in crop year 2007 fell by 45 to 1,510. At the same time acreage increased. The average acreage of hops per farm rose accordingly from 11.0 ha in 2006 to 11.7 ha in 2007.

Growth, crop estimate and weights

The winter of 2006/2007 was unusually mild. Temperatures seldom fell below freezing point. The work usually done in winter was made difficult by above-average precipitation in January and February because the ground lacked the necessary load-bearing strength due to lack of frost. The continuation of the mild temperatures led to vegetation starting very early. The spring work had to be done at a correspondingly early date. Cutting had already begun by the end of the third week of February. The plants developed so quickly that training could begin as early as mid-April, which is unusually early. This work had been finished by the end of April. At that point vertical growth differed widely according to variety, with **Hallertau Magnum** far ahead of the other varieties with a height of up to 3 meters. The hop plants survived the driest April since weather records began without any damage thanks to the good soil moisture that had built up in the months before. There were only isolated cases of adverse effects on yields due to crown rot, particularly among **Hallertau Taurus** plants. Strong winds and heavy rain, in some cases mixed with hail, in the month of May

dislodged many shoots from their training wires or even broke some of them off. Although this caused a considerable amount of additional work, it only affected yields adversely later on in seriously damaged plants, however. With the above-average temperatures continuing into June, hop growth remained ahead of normal in development and in some cases moved even further ahead. Consequently, most of the plants reached approx. 90 % of trellis height by mid-June. Also at this time, the onset of flowering could already be observed in the first hop yards. This early flowering led to below-average production volume and alpha acid yields in the **Hallertau Mittelfrueh** variety and, to some extent, in **Hallertau Magnum** hops. At the end of June the weather cooled down again and the difference in development between the hop plants and the long-term average shortened considerably. Nearly all varieties, with the exception of **Hallertau Mittelfrueh**, began to flower at the right time, which meant that there were no yield losses. A thunderstorm with heavy hail showers destroyed an estimated 1,000 mt of hops in the Hallertau region on 21 July.

Thanks to the favourable weather conditions, with sufficient rainfall in July and August, the varieties **Hallertau Taurus** and **Perle** in particular continued to develop well until harvest time. The other varieties too, with the exception of **Hallertau Mittelfrueh** and **Hallertau Magnum**, produced satisfactory yields, with good external quality and in some cases even above-average alpha acid content.

Area	Estimate (mt) August 2007	Weight (mt) 31.3.08
Hallertau	26,500.00	27,200.76
Elbe-Saale	2,253.60	2,698.29
Tettnang	1,625.00	1,613.69
Spalt	525.00	588.16
Rhenish-Palatinate/Hochdorf	35.50	37.97
TOTAL	30,939.10	32,138.87

The final total recorded as the officially certified hop volume for 2007 was 4 % above the crop estimate at the start of picking. The production volume, was 3,630 mt,

or 13 %, higher than the year before. The alpha yield by weight produced a total increase of 25 %.



GERMANY

Acreege and Variety Development

In crop year 2007 hop acreage farmed in Germany was 501 ha (2.9 %) higher than in the previous year. Despite the increase in acreage in the group comprising the

aroma varieties, their share of the final total decreased due to the comparatively greater increase in the acreage planted with high alpha varieties.

Over the last five years the acreage developed as follows:

Variety	2003 ha	2004 ha	2005 ha	2006 ha	2007 ha
Perle	2,829	2,839	2,947	3,112	3,218
Hallertau Tradition	1,727	1,958	2,173	2,322	2,445
Hallertau Mittelfrueh	1,903	1,970	2,019	2,036	2,082
Spalt Select	867	850	850	854	846
Hersbruck Spaet	1,270	1,196	1,050	871	747
Tettnang	822	790	767	752	725
Spalt	116	101	99	98	92
Other Aroma	134	185	227	239	285
Total Aroma	9,668	9,889	10,132	10,284	10,440
Northern Brewer	870	665	612	550	471
Other Bitter	44	40	39	32	31
Total Bitter	914	705	651	582	502
Hallertau Magnum	4,929	4,870	4,526	4,387	4,263
Hallertau Taurus	1,284	1,272	1,215	1,178	1,144
Herkules	-	-	-	214	868
Nugget	501	450	380	331	290
Other High Alpha	236	246	228	167	136
Total High Alpha	6,950	6,838	6,349	6,277	6,701
Others	30	44	29	27	28
GERMANY TOTAL	17,562	17,476	17,161	17,170	17,671

Share per variety group in 2007:

Aroma hops 59 %

Bitter varieties 3 %

High alpha varieties 38 %.

As was already the case in previous years, the acreage planted with aroma varieties grew further. This expansion totalled 156 ha. The most significant changes could be observed among the varieties **Hallertau Tradition** (+123 ha), **Perle** (+106 ha), **Hallertau Mittelfrueh** (+46 ha) and **Hersbruck Spaet** (-124 ha).

The steady downward trend among the bitter varieties continued. Their acreage fell by 80 ha (-13.7 %).

The acreage devoted to high alpha varieties grew for the first time since 2004. The increase in crop year 2007 amounted to 424 ha (+6.7 %). This can be attributed solely to the **Herkules** variety whose acreage increased by 654 ha. The acreage of all the other high alpha varieties was reduced, especially that of the main variety **Hallertau Magnum**, with -124 ha.

Alpha Acid

The alpha acid results for crop 2007 were good to very good and lay within the medium-term mean or above it. The two main varieties **Perle** and **Hallertau Magnum** produced surprising results. The aroma variety **Perle** shone with good yields per hectare and good, above-average alpha acid values. The high alpha varie-

ty **Hallertau Magnum**, on the other hand, was disappointing in the Hallertau growing region, in terms of both yield and alpha production, with a significantly negative effect on the alpha acid balance.

The alpha acid table shows the average alpha acid values measured in freshly harvested hops by members of "Arbeitsgruppe Hopfenanalyse" (AHA) on the fixed date of 15 October. The members of AHA are the in-house laboratories of the German hop processing plants, the Bavarian state institute of agriculture's hop department (Hüll) and Labor Veritas (Zürich).

These values constitute the basis for any adjustments of supply contracts containing "alpha clauses" between the brewing industry and hop merchants. The alpha clause was devised jointly by the German brewers' association and the hop industry association and applied for the first time as a result of the 2003 harvest. It is a contractual provision used solely in forward contracts for aroma hops. The average values serve as the basis for parties concluding new supply contracts containing an alpha clause.



Alpha acid values as is, as per EBC 7.4, in freshly harvested hops.

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

Area	Variety	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Ø 5 Years	Ø 10 Years
Hallertau	Hallertau	4.7	4.1	4.9	4.6	4.6	3.1	4.3	4.4	2.4	3.9	3.6	4.1
	Hersbruck	3.7	2.1	4.9	3.0	3.2	2.1	3.0	3.5	2.2	2.6	2.7	3.0
	Saphir	-	-	-	-	-	-	3.4	4.1	3.2	4.6	3.8	-
	Opal	-	-	-	-	-	-	-	-	-	7.4	7.4	-
	Smaragd	-	-	-	-	-	-	-	-	-	6.1	6.1	-
	Perle	6.7	7.0	8.1	7.0	8.6	3.9	6.4	7.8	6.2	7.9	6.4	7.0
	Spalt Select	5.5	4.5	6.4	4.8	6.0	3.2	4.9	5.2	4.3	4.7	4.5	5.0
	Hallertau Tradition	5.6	6.0	7.1	6.3	7.2	4.1	6.3	6.3	4.8	6.0	5.5	6.0
	Northern Brewer	9.1	9.0	10.1	9.6	10.1	6.0	9.8	9.8	6.4	9.1	8.2	8.9
	Hallertau Magnum	14.0	13.4	14.4	13.9	14.6	11.7	14.8	13.8	12.8	12.6	13.1	13.6
	Nugget	11.2	10.0	12.9	11.9	12.4	8.5	10.6	11.3	10.2	10.7	10.3	11.0
	Hallertau Taurus	13.7	15.9	15.6	15.7	16.5	12.3	16.5	16.2	15.1	16.1	15.2	15.4
	Hallertau Merkur	-	-	-	-	-	-	13.5	13.3	10.3	13.0	12.5	-
Herkules	-	-	-	-	-	-	-	-	-	16.1	16.1	-	
Elbe-Saale	Hallertau Magnum	12.4	12.2	14.0	13.9	13.9	10.2	14.0	14.4	12.4	13.3	12.9	13.1
Tettngang	Tettngang	4.0	3.8	4.9	4.4	4.6	2.6	4.7	4.5	2.2	4.0	3.6	4.0
	Hallertau	4.3	4.2	4.8	4.5	4.8	3.1	5.0	4.8	2.6	4.3	4.0	4.2
Spalt	Spalt	4.4	3.8	4.0	4.4	4.6	3.1	4.4	4.3	2.8	4.6	3.8	4.0

Alpha acid values in 2007 mostly average to above-average disappointing results, however, from the main variety Hallertau Magnum.

If the figures for the years 2003 to 2007 are not complete, the 5-year average refers to the average figure for the years available.

Figures in %

Market development

The hop market was inactive during the harvest. However, the growers' association opened their now customary hop pool. It was not until mid to late September, when the alpha values and production volumes specific to the crop became apparent, that an open market developed with firm prices for all varieties. The market for high alpha hops opened with prices around 7.00 EUR/kg for raw hops and developed a remarkable momentum until mid-October. Bidding for the varieties **Hallertau Magnum**, **Hallertau Taurus** and **Herkules** gradually rose to levels of up to 16.00 EUR/kg for raw hops. The high alpha hops had already reached the price threshold of 10.00 EUR/kg by late September. The aroma varieties were purchased at steadily rising price levels from late September to mid-October. **Perle** ranged from 6.50 to 13.00 EUR, **Hallertau Tradition** from around 6.50 to 11.00 EUR and **Spalt Select** from around 6.50 to 9.00 EUR per kilo of raw hops respectively. Growers were even offered prices of up to 8.50 EUR/kg for **Hersbruck** hops. Between the middle and the end of October the few remaining open hops of the varieties **Hallertau Taurus** and **Herkules** fetched record prices of up to 20.00 EUR/kg for raw hops, and even more than that for lots with top alpha content. Due to the record prices unheard of since crop year 1980, the market was already virtually cleared by mid-November.

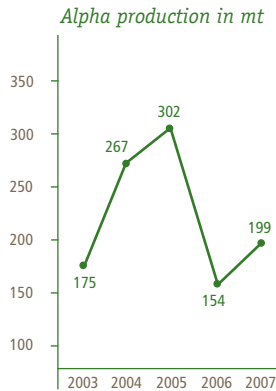
As a consequence of the opening of the hop pool by the growers' association, the other hop trading compa-

nies felt obliged to engage in hop purchasing initiatives in addition to purchasing in the market for open hops described above. However, the market for hops from crop 2007 largely played out in the conventional open market at fixed prices. According to the EU crop report, a total of 6,740 mt of hops was sold on the 2007 hop market at an average price of 11.19 EUR/kg. This corresponds to 21 per cent of the total crop. The German growers thus benefited widely from a spot market with historically high prices.

Due to the strength of demand from the brewing industry, the terms of forward contracts were gradually extended following crop 2007. Whereas in the spring of 2007 growers were offered contract terms running to 2011 at the most for alpha varieties and to 2012 at the most for aroma varieties, by the summer of 2007 contracts were already being offered with terms running up to and including 2013 and as of October the terms were up to and including 2014. As of January 2008, forward contracts were being offered up to and including 2015 for alpha and aroma hops and, finally, as of March 2008 ten-year terms were being offered for alpha hops. After more than 15 years characterised by spot markets and short contract terms, large quantities of hops are now covered by long-term forward contracts because brewers consider the safeguarding of raw material supplies at medium price levels to be more important than price-oriented purchasing on the spot markets (see page 9).



CZECH REPUBLIC



Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2006	+/-	2007	2006	2007	2006	2007
Saaz	4,926	-86	4,840	0.96	0.94	4,717.9	4,563.4
Premiant	181	68	249	1.35	1.70	244.8	424.4
Sládek	222	-7	215	1.64	2.27	363.5	488.2
Bor	17	-7	10	0.81	0.52	13.7	5.2
Total Aroma	5,346	-32	5,314	1.00	1.03	5,339.9	5,481.2
Agnus	51	0	51	1.70	2.35	86.6	119.7
Magnum	7	3	10	1.81	1.54	12.7	15.4
Total High Alpha	58	3	61	1.71	2.21	99.3	135.1
Others	10	4	14	1.42	1.02	14.2	14.3
CZECH REPUBLIC TOTAL	5,414	-25	5,389	1.01	1.04	5,453.4	5,630.6

Farm Structure

The number of hop growers decreased year on year by 6 and now stands at 139. The average area used for hop production has increased from 37 ha to 39 ha per farm.

Acreage/Production/Alpha Content

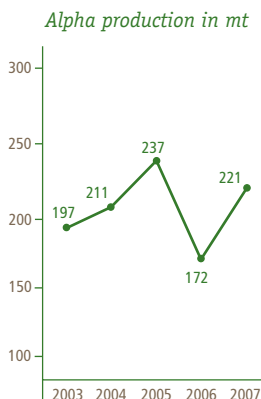
The development of the acreage in the individual hop growing areas varied widely: Saaz -38 ha, Tirschitz +/- 0, Auscha +13 ha. On the whole, the progressive reduction in hop acreage in the Czech Republic since 2001 lessened to some extent. Among the aroma varieties there was some replacement of **Saaz** with **Premiant**. Although the average yield per hectare improved year on year, it still remained below the long-term average, however. The alpha acid content of the 2007 hop crop was slightly below the average long-term figure. The results in detail (results for crop year 2006 in brackets): **Saaz** 2.7 % (2.1 %), **Sládek** 5.6 % (6.1 %), **Premiant** 8.0 % (6.9 %), **Agnus** 10.2 % (11.6 %). The alpha acid yield in terms of weight increased by 30 % year on year.

Market Situation

The entire volume produced in crop year 2007 had been purchased by forward contract. However, the Czech hop growers refused to supply the hops on the terms agreed. They were only willing to supply the hops if higher prices were paid. They cited a dramatic increase in production costs and the severe adverse effects of the rise in the value of the Czech crown against the euro as reasons for their action. According to the Czech growers' association, compliance with the terms of the forward contracts would have resulted in high losses for the growers. Moreover, they point out that due to a disproportionate percentage of old plants, the yields of **Saaz** hops have been below average for years and are subject to considerable fluctuations in production volume as a result of heat and dry conditions. The entire 2008 crop has been contracted. Changes in the varietal mix from **Saaz** to **Sládek** and **Premiant** are continuing to a limited extent.



POLAND



Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2006	+/-	2007	2006	2007	2006	2007
Lubelski	743	-104	639	1.03	1.18	768.3	752.2
Perle	47	39	86	0.80	1.03	37.4	88.2
Lomik	47	-17	30	1.31	1.76	61.6	52.9
Other Aroma	11	20	31	0.65	0.87	7.1	27.0
Total Aroma	848	-62	786	1.03	1.17	874.4	920.3
Marynka	1,011	-53	958	1.36	1.75	1,372.1	1,679.5
Other Bitter	48	15	63	0.74	0.96	35.7	60.5
Total Bitter	1,059	-38	1,021	1.33	1.70	1,407.8	1,740.0
Magnum	327	45	372	1.86	1.60	606.7	595.8
Total High Alpha	327	45	372	1.86	1.60	606.7	595.8
POLAND TOTAL	2,234	-55	2,179	1.29	1.49	2,888.9	3,256.1



Farm Structure

Prior to the harvest in 2007, the number of hop growers in Poland decreased by a further 47. The 1,066 producers still active farmed an average of 2 ha each, i.e. exactly the same acreage as in crop year 2006, which meant that total acreage decreased accordingly. The centre of hop growing in Poland is the region around the town of Lublin.

Acreage/Production/Alpha Content

As in the previous year, the aroma variety **Lubelski** and the bitter variety **Marynka** were cut back. Consequently, acreage decreased by 2.5 %. During the vegetation period conditions for hop growth were favourable. Isolated cases of hail and storm damage in the spring and in July did affect the final production volume, however. Nevertheless, the yield per hectare improved by 15 % year on year. The alpha contents were also significantly higher: aroma varieties 3.0 % (2.3 %), bitter varieties 8.3 % (7.6 %). As a result, the total volume of alpha by weight rose by 28 %.

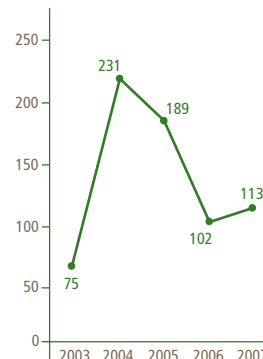
Market Situation

Citing lower yields due to hail and storm damage, which, as it later transpired, were not nearly as significant as at first stated, both growers and Polish hop merchants unilaterally declared the existing hop supply contracts null and void. Due to the tense market situation and in order to limit the damage, the buyers felt compelled to submit to the demands of the Polish suppliers for considerable price increases. However, after a further sharp rise in prices due to demand from Polish hop merchants, Polish suppliers did not consider themselves obliged to honour this second agreement either. No stocks of the 2007 crop are available. Because of the anarchic situation in Poland, there are no reliable data available with regard to forward contract volume. It is unlikely, however, that many forward contracts have been concluded for future crop years. No change in acreage is anticipated.



Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2006	+/-	2007	2006	2007	2006	2007
Aurora	940	52	992	1.22	1.21	1,147.0	1,205.0
Styrian Golding	344	-31	313	0.98	1.08	336.0	340.0
Bobek	151	7	158	1.70	1.87	256.0	296.0
Other Aroma	0	31	31	0.00	1.94	0.0	60.0
Total Aroma	1,435	59	1,494	1.21	1.27	1,739.0	1,901.0
Magnum	72	4	76	1.11	1.13	80.0	86.0
Total High Alpha	72	4	76	1.11	1.13	80.0	86.0
SLOVENIA TOTAL	1,507	63	1,570	1.21	1.27	1,819.0	1,987.0

Alpha production in mt



Farm Structure

2007 saw the number of active hop growers decrease by 10 year on year to stand at 140. At the same time, the average hop acreage rose from 10 ha to 11 ha per farm. The main hop growing region is Savinja Valley.

Acreage/Production/Alpha Content

While total hop acreage increased by 4 % in 2007, the acreage of the **Styrian Golding** variety was reduced. Although weather conditions were hardly typical, the overall effect they had on hop growth was positive. However, production volume reduced as a result of hailstorms in May and, in particular, in August affecting more than 400 ha.

As was the case in 2006, alpha levels were far below the long-term average levels. The results for the aroma varieties in 2007 compared with the previous year: **Styrian Golding** 3.2 % (3.0 %), **Bobek** 4.0 % (4.2 %), **Aurora** 6.5 % (6.3 %). Compared with the previous year, the volume of alpha produced improved by 11 %.

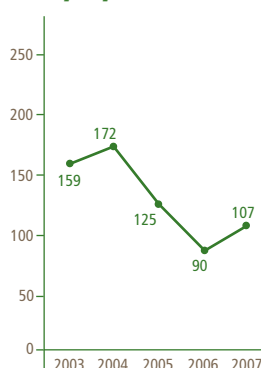
Market Situation

Pointing to crop losses as a result of a tornado on 17.8.2007, a considerable number of hop growers failed to supply the volume agreed in their existing contracts. Once all relevant data had been collected, this action proved to have been mostly unrightful.

Production volume was by no means as low as forecast. Gradually it became known that some forward contract parties had been undersupplied and the excess hops thus available had been sold to other buyers at attractive spot market prices. What is more, the greater part of the Slovenian hop crop is traditionally taken up by the former growers' cooperative Hmezad. The forward contracts for this part of the crop could not be fulfilled due to the bankruptcy of the marketing company Unihop. Those buyers of Slovenian hops who were not supplied were left to find solutions of their own. It is not certain that existing contracts for the crops of 2008 and the following years will be fulfilled by the Slovenian parties. The acreage strung with aroma varieties for the 2008 harvest has probably increased slightly.

ENGLAND

Alpha production in mt



Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2006	+/-	2007	2006	2007	2006	2007
Golding	260	15	275	1.51	1.44	391.4	394.9
First Gold	170	3	173	0.86	0.95	147.0	164.1
Fuggles	147	-7	140	1.25	1.52	184.3	212.1
Challenger	79	6	85	1.30	1.55	103.0	131.9
Other Aroma	117	31	148	1.18	1.28	138.5	189.3
Total Aroma	773	48	821	1.25	1.33	964.2	1,092.3
Target	133	-12	121	1.42	1.55	189.5	188.1
Other High Alpha	137	-16	121	1.36	1.59	185.9	192.6
Total High Alpha	270	-28	242	1.39	1.57	375.4	380.7
Others	0	0	0	0.00	0.00	0.7	0.0
ENGLAND TOTAL	1,043	20	1,063	1.29	1.39	1,340.3	1,473.0

Farm Structure

As in previous years, hops were produced in England by 60 growers. The average area devoted to hop growing was 17.7 ha. Hop growing is divided almost equally between two areas in South-East England and the Midlands.

Acreage/Production/Alpha Content

The acreage planted with aroma varieties grew by 6 %, whereas there was a reduction of 10 % in high alpha acreage. English hop farming is concentrating more and more on aroma varieties, while bitter and high alpha varieties are becoming increasingly insignificant. In total, the acreage recorded for crop year 2007 showed a slight increase over the previous year.

With regard to yields and alpha acid contents, the results for 2007 can be described as average.

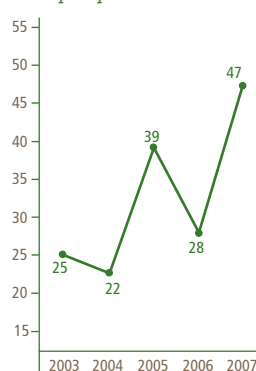
Alpha acid content in 2007, with previous year in brackets: **Golding** 4.9 % (4.4 %), **First Gold** 8.1 % (8.2 %), **Fuggles** 4.7 % (4.3 %), **Challenger** 7.0 % (6.5 %), **Target** 10.8 % (9.4 %). In total, the weight of alpha acid produced in 2007 was up by 18 % year on year.

Market Situation

More than 80 % of the volume produced was sold on the basis of forward contracts. The crop is completely sold out. By April more than 80 % of the 2008 crop was already under contract. A slight increase in acreage is expected, mainly accounted for by aroma varieties.

FRANCE

Alpha production in mt



Area	Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
		2006	+/-	2007	2006	2007	2006	2007
Alsace	Strisselspalt	636	-14	622	1.56	1.93	992.2	1,198.1
	Other Aroma	109	17	126	1.15	1.74	125.4	219.4
	Total Aroma	745	3	748	1.50	1.90	1,117.6	1,417.5
	Bitter	4	-1	3	1.38	0.67	5.5	2.0
	High Alpha	18	-1	17	1.86	1.32	33.5	22.5
	Total Alsace	767	1	768	1.51	1.88	1,156.6	1,442.0
Nord	Aroma	10	-8	2	0.90	1.55	9.0	3.1
	Bitter	4	0	4	1.48	1.53	5.9	6.1
	High Alpha	14	8	22	1.16	1.33	16.2	29.2
	Total North	28	0	28	1.11	1.37	31.1	38.4
FRANCE TOTAL		795	1	796	1.49	1.86	1,187.7	1,480.4

Farm Structure

In crop year 2007 there were 90 active hop growers, 6 fewer than in the previous year. The average hop acreage per farm increased from 8.3 ha to 8.8 ha.

Acreage/Production/Alpha Content

Hop acreage increased in total by 1 ha. In the Alsace region, the process of change in the variety mix among the aroma hop varieties continued. Most of the acreage that had been cleared of **Strisselspalt** hops was replanted with **Hallertau Tradition**.

FRANCE



The unusually warm and dry conditions in April encouraged early flowering of the hop plants. Some high alpha varieties had already reached the cone development stage in June, which ultimately led to a reduced yield.

The average alpha content of the **Strisselspalt** hops of 2.8 % (previous year 1.8 %) was relatively high for this variety compared with the long-term average of 2 %. The high crop yield and the very high alpha content

resulted in a 69 % rise in alpha volume compared with the 2006 crop.

Market Situation

The 2007 crop is sold out. The entire estimated crop volume for the years 2008, 2009 and 2010 has already been contracted. No significant changes in acreage are anticipated in crop year 2008.

SPAIN



Variety	Development of acreage Acreage ha			Development of production			
	2006	+/-	2007	Ø-Yield mt/ha		Production mt	
Aroma	1	0	1	0.60	0.50	0.6	0.5
Nugget	521	-34	487	2.14	1.88	1,117.1	915.3
Columbus	4	1	5	2.95	2.68	11.8	13.4
Magnum	4	0	4	1.38	1.88	5.5	7.5
Total High Alpha	529	-33	496	2.14	1.89	1,134.4	936.2
SPAIN TOTAL	530	-33	497	2.14	1.88	1,135.0	936.7

Farm Structure

A detailed acreage survey addressed directly to the growers was conducted for the first time in 2007. As a result, the acreage data had to be corrected downwards. On average, the 248 growers in the region around Leon farmed an average of 2 ha of hops.

Acreage/Production/Alpha Content

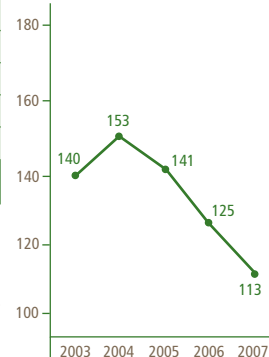
A new acreage survey made it necessary to correct the acreage stated for previous crop years. Accordingly, the acreage estimated for the 2006 crop had to be corrected downwards by 70 ha to 530 ha. In comparison with crop year 2006, acreage in 2007 fell by 6 %. The temperatures in June and the first two-thirds of the month of July were below the long-term average and there was substantial rain. Consequently, growth was

slow and flowering was delayed. This led to below-average production volume per hectare. Compared with 2006, there was a decrease of 12 %. On the other hand, the alpha acid content of the most widely grown variety **Nugget** was above average, with 12 % compared to 11 % in the previous year. The resulting alpha yield in tons was therefore nearly 10 % down year on year.

Market Situation

The entire crop was sold to the local brewing industry. Growers and brewers have concluded a new contract for 1,000 mt of **Nugget** for each of the crop years up to and including 2011. Nevertheless, a reduction in acreage is to be expected, as most of the growers had already reached their planting decisions before the new forward contract was concluded.

Alpha production in mt



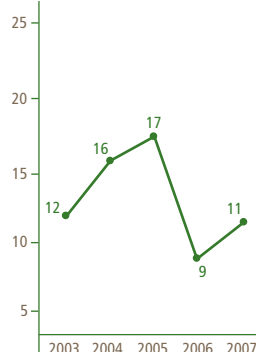
SLOVAKIA



Variety	Development of acreage Acreage ha			Development of production			
	2006	+/-	2007	Ø-Yield mt/ha		Production mt	
Saazer	275	-5	270	1.04	0.92	285.0	248.0
Premiant	30	0	30	0.97	1.53	29.0	46.0
SLOVAKIA	305	-5	300	1.03	0.98	314.0	294.0

SLOVAKIA

Alpha production in mt



Farm Structure

One farm has stopped producing hops. The remaining 12 hop farms, whose hop yards are mainly in the Váh Valley, have an average hop acreage of 25 ha per farm.

Acreage/Production/Alpha Content

With acreage virtually unchanged and an average yield of 0.98 mt/ha, the production volume was below the long-term average. A heat wave and the absence of rain in the second half of July had an adverse effect on the **Saaz** aroma hops. The cones remained very small.

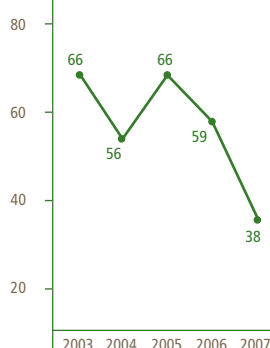
Although the alpha content of the **Saaz** variety improved year on year, it was only 3.1 % and therefore still below the long-term average. The volume of alpha acid produced rose by 24 % compared with crop year 2006.

Market Situation

Forward contracts accounted for the entire 2007 crop. The contract rate for the 2008 and 2009 crops is already 100 %. The acreage planted with **Saaz** hops is being reduced slightly.

UKRAINE

Alpha production in mt



Variety Group	Development of acreage			Development of production			
	Acreage ha			Ø-Yield mt/ha		Production mt	
	2006	+/-	2007	2006	2007	2006	2007
Aroma	895	-175	720	1.01	0.58	904.0	420.0
Bitter	569	-144	425	1.00	0.66	569.0	280.0
UKRAINE TOTAL	1,464	-319	1,145	1.01	0.61	1,473.0	700.0

Farm Structure

Approximately 70 farms are involved in hop growing, with acreage averaging 16 ha per farm. The centre of hop growing is the area around the town of Zitomir.

Acreage/Production/Alpha Content

Due to lack of information, the data for 2005 had to be taken for 2006. The weather conditions in 2007 were ideal for the development of the hops. The results in

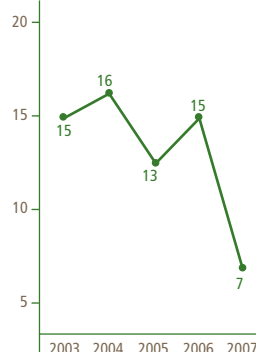
terms of average alpha acid content, amounting to 4 % for aroma varieties and 7.5 % for alpha varieties, were good. However, by international standards the yields in the Ukraine can only be described as very poor.

Market Situation

The hops harvested in 2007 are completely sold out. Acreage is expected to rise by approx. 200 ha in the coming crop year.

RUSSIA

Alpha production in mt



Variety Group	Development of acreage			Development of production			
	Acreage ha			Ø-Yield mt/ha		Production mt	
	2006	+/-	2007	2006	2007	2006	2007
Aroma	195	-35	160	0.80	0.70	156.0	112.0
Bitter	225	-157	68	0.82	0.68	184.0	46.0
RUSSIA TOTAL	420	-192	228	0.81	0.69	340.0	158.0

Farm Structure

As a result of privatisation measures, the production cooperatives that had only recently been created were turned into 38 independent hop producers. In the process, the average acreage under hops fell from 17.5 ha to 6 ha per farm. Hops are grown mainly in the Republic of Chuvashia, which is the northernmost hop-producing region in the world.

Acreage/Production/Alpha Content

Hop acreage decreased by 46 % from 2006 to 2007. This reduction mainly affected bitter varieties. The total yield was slightly above the long-term average. The alpha content recorded for the aroma varieties was an unusually good 4.2 % (previous year: 3.2 %). The bitter varieties, with 5.3 % (previous year: 5.4 %), were slightly below the usual range. As a result of the reduction in acreage and the lower average yield, alpha acid production in 2007 was 53 % down year on year.



Market Situation

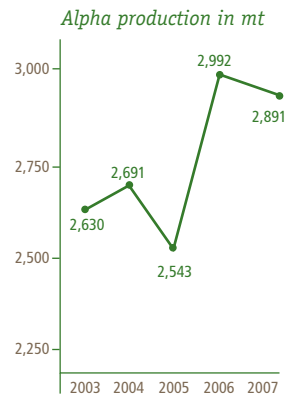
No stocks of the 2007 crop are available. In April a forward contract rate of 40 % was reported for hops

harvested in 2008. In spite of rising domestic demand for hops, an increase in acreage is not anticipated.

USA



Area	Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
		2006	+/-	2007	2006	2007	2006	2007
Washington	Willamette	1,843	-37	1,806	1.37	1.48	2,524.2	2,667.5
	Cascade	452	76	527	2.19	2.28	989.2	1,200.4
	Centennial	86	10	96	1.42	1.23	121.7	118.3
	Palisade	22	15	37	3.34	2.81	73.4	104.0
	Golding	21	0	21	1.14	1.69	23.9	35.4
	Mount Hood	18	0	17	1.23	1.51	22.1	25.7
	Horizon	14	-8	6	1.39	1.25	19.5	7.5
	Perle	10	-10	0	1.10	0.00	11.0	0.0
	Other Aroma	314	45	359	1.73	0.92	544.0	331.2
	Total Aroma	2,780	89	2,869	1.56	1.57	4,329.0	4,490.0
	Cluster	142	6	148	2.46	2.28	348.7	337.0
	Total Bitter	142	6	148	2.46	2.28	348.7	337.0
	CTZ	2,733	536	3,270	3.18	3.04	8,694.6	9,938.3
	Galena	1,541	-315	1,226	2.04	1.99	3,144.5	2,440.9
	Nugget	445	-3	442	2.06	2.14	918.6	946.4
	Chelan/Tillicum	259	97	356	2.47	2.55	639.6	907.5
	Millennium	368	-74	295	2.61	2.63	959.3	776.0
	Warrior	170	-34	137	2.43	2.14	412.3	292.7
	Chinook	148	-22	126	2.09	2.04	309.8	256.5
Other High Alpha	126	210	337	2.73	2.24	343.9	754.8	
Total High Alpha	5,792	396	6,188	2.66	2.64	15,422.6	16,313.1	
Total Washington	8,714	491	9,205	2.31	2.30	20,100.3	21,140.1	
Oregon	Willamette	931	38	970	1.64	1.77	1,523.1	1,713.9
	Mount Hood	46	26	72	2.45	1.84	112.8	132.5
	Golding	47	-1	47	1.97	1.56	92.5	73.2
	Cascade	25	0	25	2.07	1.80	51.8	45.0
	Perle	30	-17	13	1.56	1.38	46.8	18.0
	Centennial	0	10	10	0.00	1.36	0.0	13.6
	Other Aroma	242	-63	179	1.14	1.58	276.9	282.3
	Total Aroma	1,322	-6	1,316	1.59	1.73	2,103.9	2,278.5
	Nugget	607	71	678	2.58	2.50	1,567.3	1,695.0
	Millennium	104	15	119	3.25	2.60	337.6	309.8
	Warrior	5	-5	0	2.34	0.00	11.7	0.0
	Other High Alpha	0	20	20	0.00	2.27	0.0	45.4
	Total High Alpha	716	101	817	2.68	2.51	1,916.6	2,050.2
Total Oregon	2,038	95	2,133	1.97	2.03	4,020.5	4,328.7	
Idaho*	Total Aroma*	686	-30	656	1.35	1.05	924.4	686.4
	Total Bitter*	4	3	7	2.00	1.92	8.0	14.0
	Total High Alpha*	442	67	508	2.52	2.29	1,113.5	1,161.5
	Total Idaho	1,132	40	1,172	1.81	1.59	2,045.9	1,861.9
Total Aroma*	4,788	53	4,841	1.54	1.54	7,357.2	7,454.9	
Total Bitter*	146	9	155	2.44	2.26	356.7	351.0	
Total High Alpha*	6,950	564	7,513	2.66	2.60	18,452.7	19,524.8	
USA TOTAL	11,884	626	12,510	2.20	2.19	26,166.7	27,330.7	



Minor statistical deviations may result from conversion of acres into hectares and pounds into metric tons.

* As growers in Idaho have only indicated total acreage and production figures since 2002, the figures for the individual variety groups are estimates.



Farm Structure

For crop 2007, the number of US growers or decision-making entities has been calculated at 62. The average farm size was therefore 200 ha.

Acreage/Production/Alpha Content

The overall US acreage expanded by 5 % or 626 ha in 2007 compared to 2006. Most of the expansion came from high alpha varieties. The variety group of **Columbus/Tomahawk/Zeus (CTZ)** increased by 622 ha and was followed by **Summit** which added 229 ha. **Chelan** and **Super Galena**, as well as **Nugget**, also expanded.

The variety that lost most ground was **Galena** which dropped by more than 300 ha. In contrast to the alpha varieties, aroma varieties remained relatively unchanged, with the exception of **Cascade** which expanded by 77 ha.

The increase in acreage of alpha varieties did not translate into higher alpha production. Compared to crop 2006, the US actually produced approx. 100 tons of alpha less. This result was particularly due to poor performance of the **CTZ** variety group.

Variety development

The acreage of the main varieties in the US growing regions developed as follows:

Variety	2003 ha	2004 ha	2005 ha	2006 ha	2007 ha
Willamette	2,409	2,362	2,645	2,823	2,816
Cascade	994	619	505	484	561
Centennial	-	-	45	86	106
Mount Hood	101	103	109	64	89
Other Aroma	1,327	1,226	1,288	1,331	1,269
Total Aroma	4,831	4,310	4,592	4,788	4,841
Cluster	255	244	250	146	155
Total Bitter	255	244	250	146	155
Columbus-Tomahawk-Zeus (CTZ)	2,317	2,679	2,911	2,911	3,533
Galena	1,410	1,638	1,849	1,733	1,429
Nugget	1,012	869	1,004	1,067	1,120
Millennium	728	562	571	473	414
Chelan/Tillicum	151	159	140	259	356
Chinook	236	252	251	174	139
Warrior	507	326	241	175	137
Other High Alpha	121	98	115	158	385
Total High Alpha	6,482	6,583	7,082	6,950	7,513
USA TOTAL	11,568	11,137	11,924	11,884	12,510*

As growers in Idaho have only indicated total acreage since 2002, the figures for the individual variety are estimates.

** rounding difference*

Crop Development

Washington: An abundant winter snow pack assured generous water supplies throughout the growing season. Due to favourable conditions for plant growth and development, by the end of August, growers were expecting an above-average crop. However, a small amount of rain at the beginning of harvest caused powdery mildew to flare up and attack the hop cones in susceptible varieties. Within a week, hop yards lost their fresh green color as hop cones started to turn brown. Soon growers were unable to keep pace with the harvesting of quickly ripening and browning yards. Some even decided to skip harvesting brown yards in order to save those that were still green. Unfortunately, no matter which strategy was employed, none

really helped to reduce the loss in yield and especially in alpha in varieties susceptible to powdery mildew (particularly **CTZ**). As a result, the colour of many **CTZ** lots was below normal, the average alpha content was off by as much as 3 – 4 percentage points and the alpha in bales degraded more quickly than usual during storage.

Oregon: Oregon experienced a normal winter with an adequate snow pack and precipitation for the crop 2007 season irrigation needs. Most varieties responded well to the moderate growing conditions throughout the summer. Pests and mildew were not a major issue during the growing season.



Alpha Acid Table

Variety	2003	2004	2005	2006	2007	Average
Willamette	4.0%	4.2%	4.2%	4.6%	4.5%	4.3%
Mount Hood	4.5%	4.3%	4.4%	4.6%	4.4%	4.4%
Cascade	5.0%	5.5%	5.8%	6.1%	5.7%	5.6%
Cluster	6.3%	6.4%	6.0%	7.0%	6.5%	6.4%
Galena	11.9%	11.9%	12.1%	12.1%	11.6%	11.9%
Nugget	12.7%	12.7%	12.3%	13.2%	12.3%	12.6%
Chinook	12.8%	12.9%	11.5%	12.2%	11.6%	12.2%
Super-High Alpha	14.5%	14.3%	14.4%	15.2%	13.2%	14.3%

Contract Market

With strong demand for alpha and a relatively low forward contracting rate as of crop 2007, growers had for the first time in many years the opportunity to sell the greater part of their production at prices above the cost of production.

Aroma varieties: By the summer of 2007, contract prices for aroma hops had risen to over 8.80 USD/kg. At these levels, prices were high enough to prevent further acreage removal, but too low to encourage growers to plant additional acreage.

High alpha varieties: The fact that all of the existing CTZ hops from crops 2007 through 2009 had been sold by late spring meant that any additional future volumes had to come from crop 2008. The new acreage required the purchase or lease of new land, new trellis and drip irrigation equipment – a costly undertaking. In order to hedge their risks, growers were only willing to make this investment, if they received long-term contracts of no less than five years with revenues that would repay the entire investment over this period of time. Depending on the needs of individual operations, contracts varied, but generally prices started at 66.00 USD per kilo of alpha for raw hops in crop 2008 then declined to around 44.00 USD for 2009 and 2010 before finally dropping into the 20’s for crops 2011 and 2012. Growers also saw an opportunity to sell their open hops from 2010 to 2012 along with the new acreage contracts from 2008 to 2012. As a result, the US high alpha acreage became highly contracted from 2007 to 2009 and well contracted until 2012.

While most of the contracting activity centred on the CTZ varieties, growers also sold all other alpha varieties. Pricing of these varieties was linked to the re-

venue per acre generation of CTZ. On this basis, all expected quantities of Galena and Nugget for crops 2007 through 2009 were completely sold out by summer 2007.

Spot Market

Reports during August of growers having sold some quantities of varietal alpha hops at approx. 22.00 USD/kg as part of a three-year contract, raised growers’ price expectations. The first variety to generate any spot hops was Willamette which initially sold at 16.00 USD/kg. Cascade soon followed and cemented the pricing of aroma hops at around 16.50 USD/kg. As it became clear in early September that alpha hops would not produce the expected yields and as the first growers started to fall short of their contracted deliveries, price expectations for raw hops increased from 132.00 – 154.00 USD/kg alpha pre-harvest to more than 200.00 USD/kg alpha. While some growers did initially sell at approx. 165.00 USD/kg alpha, most sales occurred at between 198.00 and 220.00 USD/kg alpha level during harvest. However, as the harvest stretched into October, and as alpha contents declined even further, estimates put the US alpha shortfall between 300 and 500 tons of alpha. As a consequence, the last remaining alpha hops sold in late autumn at prices ranging from 330.00 USD to as much as 992.00 USD/kg alpha and the last aroma hops sold for 44.00 USD to more than 66.00 USD/kg of raw hops.

Further Market Developments

By January 2008, US growers had already sold an estimated 1,500 ha of new production, an amount that was thought to be the maximum new acreage that the industry could handle. The pricing reflected the necessary investment needs, which pushed prices above



U S A

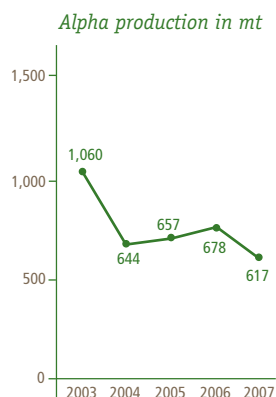
88.00 USD per kilo of alpha for raw hops. As it became clear that even more alpha and therefore more acreage was needed, prices continued to rise until the returns would pay for the necessary infrastructure upgrades and the profitability of hops exceeded other competing crops in the respective area, making these acres available for hop production. In view of the fact that American farmers are able to obtain a 60 – 80 % yield on crops in their first year, they were able to take advantage of the attractive selling prices and conclude long-term contracts from crop 2008 onwards. Prices of five-year contracts were concluded at 220.00 USD per

kilo alpha in the first year, 132.00 USD per kilo alpha in the second year and variable prices thereafter.

While the fortunes of US hop growers have changed dramatically, much of the increase in prices and in revenues will be spent on paying off debt that has accumulated over the last 10 years, upgrading harvesting operations and expanding acreage on a large scale for the 2008 crop. It is estimated that acreage expansion alone will have cost US growers about 80 million USD. In comparison, the total farm-gate value of crop 2007 was 169 million USD.



C H I N A



Area	Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
		2006	+/-	2007	2006	2007	2006	2007
Xinjiang	Tsingdao Flower	945	-13	932	2.98	3.01	2,814.0	2,801.0
	SA-1	430	103	533	1.79	1.88	770.0	1,000.0
	Marco Polo	292	61	353	3.41	3.40	995.0	1,200.0
	Kirin Flower	135	69	204	3.19	3.18	430.0	648.0
	Other Aroma	78	1	79	2.24	2.25	175.0	178.0
	Total Xinjiang	1,880	221	2,101	2.76	2.77	5,184.0	5,827.0
Gansu	Tsingdao Flower	1,343	117	1,460	3.07	3.32	4,120.0	4,853.0
	Nugget	208	136	344	1.52	0.78	316.0	269.0
	Kirin Flower	73	-60	13	1.85	3.85	135.0	50.0
	Other High Alpha	0	106	106	0.00	2.32	0.0	246.0
	Other Aroma	40	42	82	3.18	1.83	127.0	150.0
	Total Gansu	1,664	341	2,005	2.82	2.78	4,698.0	5,568.0
	Total Aroma	548	146	694	1.96	1.91	1,072.0	1,328.0
	Total Bitter	2,496	113	2,609	3.00	3.20	7,499.0	8,352.0
	Total High Alpha	500	303	803	2.62	2.14	1,311.0	1,715.0
	CHINA TOTAL	3,544	562	4,106	2.79	2.78	9,882.0	11,395.0

Farm Structure

The 46 farms already involved in hop growing in crop year 2006 were joined by 16 new producers. Taking into account the increase in hop acreage, the average area devoted to hop growing was 66 ha per farm, compared with 77 ha in the previous year.

Acreage/Production/Alpha Content

The increase in hop acreage applied to all varietal groups. The high alpha varieties accounted for the greatest share of the increase, with growth of 61 %.

Year on year, total acreage grew by 16 % in crop year 2007. In May and June, a storm caused lasting damage to plants in the hop growing region of Xinjiang. In Gansu the plants grew very slowly as a result of low temperatures in April and June. The plants entered a second flowering phase. The alpha acid contents were correspondingly low and very disappointing. The main variety, **Tsingdao Flower**, only produced an average of 4.5 %. Despite the significantly larger acreage, the alpha yield was some 9 % below that of the previous year.



Market Situation

A large proportion of the 2007 crop was sold on a forward-contract basis. At the time of going to press in May 2008, only a small quantity of approx. 220 mt with low alpha acid content remained unsold due to overpricing. Approx. 75 % of the estimated production volume for 2008 has already been contracted. These contracts are defined in terms of volume, but are mostly signed without an agreed price and are considered only as declarations of intent. After the contract is signed, the contracting parties conduct on-going negotiations until they reach agreement on a fair market price at which the contract can be fulfilled. The high demand for hops is driving further growth in acreage. An increase of up to 1,500 ha for crop year 2008 seems to be possible. However, the resulting yield will probably be low, as newly planted hops in China produce at best 30 % of their full yield in the first year. In addition to the bitter variety **Tsingdao Flower**, mainly

alpha and high-yielding varieties are being planted. An increase in hop acreage would enable the Chinese brewing industry to raise its bittering rates further. As a result of a scarcity of hops these rates have now fallen to only 2 gr/hl and have thus entered a range that is technically questionable. For years now, China's hop growers have been producing considerably less than the expansive domestic brewing industry requires. The resulting gaps cannot be closed by imports because of price and availability problems. Even with the above-mentioned increase in acreage, China will still not be able to meet its national requirements.

Hop Statistics

There are no reliable statistics on acreage and production volume in China. The figures presented here, which due to the size of the Chinese hop growing regions are often based on estimates, have been gathered using our own sources.

CROP 2008: SOUTH AFRICA



Variety	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2007	+/-	2008	2007	2008	2007	2008
Southern Star	284	10	294	2.03	1.40	577.6	412.0
Southern Promise	108	3	111	2.35	1.54	253.8	171.0
Outeniqua	34	-12	22	1.69	1.41	57.4	31.0
Others	8	9	17	1.43	0.82	11.4	14.0
SOUTH AFRICA TOTAL	434	10	444	2.07	1.41	900.2	628.0

Farm Structure

The composition of the 15 hop-producing farms remained the same, with 11 private producers, three commercial farms and one research institute. The hop growing regions are located in the very south of the country.

Acreage/Production/Alpha Content

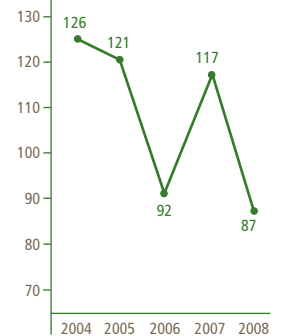
The 2008 crop, harvested in February and March, proved to be the worst in South Africa's 20-year hop growing history. The average yield per hectare was 32 % below the record level seen in crop year 2007. Damp soil conditions and lack of sunshine were presumably the main reason for the poor crop. This was exacerbated

by infestation by American bollworm which caused widespread damage to the hop cones immediately prior to harvest. The alpha content, on the other hand, was well above average. The results for crop year 2007 are in brackets: **Southern Promise** 12.2 % (10.4 %), **Outeniqua** 14.2 % (12.6 %), **Southern Star** 14.6 % (13.2 %). Nevertheless, the alpha acid yield fell year on year by 26 %.

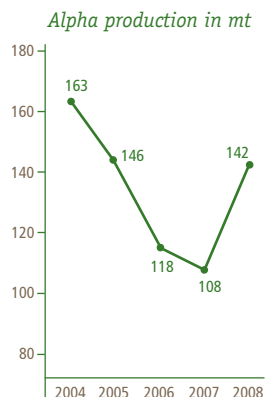
Market Situation

Due to the low yield producers were unable to supply enough hops to satisfy the demand for local beer production. The shortfall has to be met by purchases on the world market.

Alpha production in mt



CROP 2008: AUSTRALIA



Area	Variety	Development of acreage			Development of production			
		Acreage ha		2008	Ø-Yield mt/ha		Production mt	
		2007	+/-			2007	2008	2007
Tasmanien	Super Pride	96	8	104	1.93	2.29	186.0	237.7
	Pride of Ringwood	85	4	89	1.86	2.71	158.0	239.8
	Millennium	39	8	47	2.73	2.10	106.0	99.5
	Victoria	12	0	12	2.93	3.18	36.0	39.4
	Cluster	9	0	9	1.67	2.51	15.0	22.3
	Others	17	14	31	2.02	1.51	34.0	46.4
	Total Tasmania	258	34	292	2.07	2.35	535.0	685.1
Victoria	Topaz	68	8	76	2.57	3.58	174.0	271.0
	Super Pride	57	14	71	1.94	1.83	110.0	129.9
	Pride of Ringwood	29	-9	20	0.85	2.00	25.0	40.0
	Victoria	13	0	13	1.46	2.54	19.0	33.5
	Cluster	10	0	10	1.50	2.00	15.0	20.0
	Others	6	-4	2	2.04	4.05	12.0	9.7
	Total Victoria	183	9	192	1.94	2.62	355.0	504.1
	Total Bitter	133	-5	128	1.60	2.52	213.0	322.1
	Total High Alpha	285	38	323	2.21	2.51	631.0	811.0
	Total Others	23	10	33	2.00	1.70	46.0	56.1
	AUSTRALIA TOTAL	441	43	484	2.02	2.46	890.0	1,189.2

Farm Structure

As in the previous year, hops were produced in Australia on 8 farms. As a result of an increase in acreage the average area per farm devoted to hop growing rose from 55 ha to 60 ha.

Acreage/Production/Alpha Content

The growth in acreage, totalling 10 % nationwide, was due to increased planting of high alpha varieties, mainly in the hop region of Tasmania.

Hop growth was generally good. Some areas suffered from water shortages, which led to lower yields. All in all, an above-average crop was expected. However, these prospects were dampened when Tasmania was visited at the start of the high alpha hop harvest by a strong, hot wind with a speed of 102 kph and a temperature of 37° which raged for nearly 12 hours on 14.3.2008. It literally dried out the plants at the edges of the hop yards in particular, making the lupulin fall out of the cones and thus causing damage.

Although the yields of the high alpha variety **Super**

Pride failed to meet expectations in either of the Australian hop growing regions, this was compensated for by the very good results for the **Topaz** variety. Most of the hop growers in Victoria brought in very good harvests. In Tasmania on the other hand, the picture was varied, with some growers reporting excellent yields, while others suffered losses.

Average alpha contents in crop year 2008, compared with the results of the previous year: **Pride of Ringwood** 8.0 % (9.4 %), **Super Pride** 12.8 % (13.3 %), **Millennium** 12.8 % (14.3 %), **Topaz** 15.7 % (12.8 %). Thanks to the enlarged acreage and the improved yield per hectare, the alpha yield increased by 31 % year on year.

Market Situation

By the time of harvest the 2008 hop crop had been completely sold by contract. New and interesting aroma varieties are coming onto the market as a result of the hop breeding programme of Hop Products Australia. Therefore a further increase in acreage is expected.

CROP 2008: NEW ZEALAND

Variety Group	Development of acreage Acreage ha			Development of production Ø-Yield mt/ha Production mt			
	2007	+/-	2008	2007	2008	2007	2008
Aroma	224	2	226	1.99	1.71	446.7	387.0
High Alpha	130	4	134	1.95	2.47	253.4	331.0
NEW ZEALAND TOTAL	354	6	360	1.98	1.99	700.1	718.0

Farm Structure

As in the previous year, hops are grown by 17 farmers in the Nelson region on New Zealand's South Island. The average acreage strung with hops also remained unchanged at 21 ha.

Acreage/Production/Alpha Content

Acreage increased by 6 ha. The development of the aroma varieties was affected by frost in the late spring, which led to a drop in yield. The volume of alpha varieties produced, on the other hand, was slightly above average. The alpha acid contents presented a similar picture. While the results for the aroma varieties were slightly below the long-term average, the results recor-

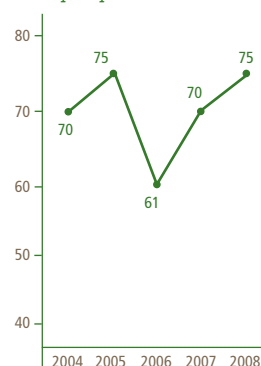
ded for the alpha varieties were far above the average. The alpha content of the main varieties compares with the previous year as follows: **NZ Hallertau Aroma** 7.0 % (8.0 %), **NZ Pacific Gem** 16.0 % (15.0 %). Year on year, the alpha yield from the 2008 crop rose by 7 %.

Market Situation

Only small quantities were available on the spot market because the crop had already been sold through forward contracts. There is also a high forward contract rate for subsequent years. The New Zealand hop industry is maintaining its focus on breeding unique aroma varieties.



Alpha production in mt



PLANT DEVELOPMENT 2008



Germany

The winter of 2007/2008 brought plentiful rainfall. There was an unusually large amount of rain in March in particular. Conditions were also comparatively mild until mid-March, without any days of frost. This led to a slight delay in spring work, as ground conditions were not always suitable for vehicles. Nevertheless, most of the hop plants were cut in good time.

From the second half of March onwards conditions became unusually cool, with heavy precipitation continuing. By comparison with the long-term average, vegetation at this point was slightly delayed. Temperatures rose again in early May, just in time for training, and exceeded the long-term mean. The weeks that followed were sunny and dry. On the whole, apart from a few exceptions, the month of May was above-average in temperature and somewhat too dry. However, by the beginning of June all varieties had developed in line with the long-term average and the plants had grown to approx. 60 % of trellis height.

USA

Winter precipitation in all three hop growing regions was higher than average, assuring ample water supplies for the growing season. Temperatures, especially in Washington State, were considerably below normal during spring. As a result, growth of the aroma varieties and many newly planted hop yards (young hops in their first year) were adversely affected. While the growing season is still considered long enough for the plants to make up for this delay, regardless of the increase in acreage, it will only be possible to achieve a new record this year if there are as few deviations from normal weather conditions as possible.

Experience shows that the weather patterns in July and August have a decisive influence on the outcome of the harvest, in terms of both quality and quantity.



Germany

According to the figures published by the hop growers' association of Germany, the total acreage allocated to hops in crop year 2008 is 18,695 ha. This shows that acreage has increased by 1,024 ha over 2007, which corresponds to a rise of just below 6 %. Differences in acreage development can be seen between the various hop growing regions: Hallertau +923 ha, Elbe-Saale +63 ha, Tett nang +40 ha, Spalt -2 ha, other +/-0 ha. There have been no fundamental changes among the varieties. The predominant share of new acreage is accounted for by the new high alpha variety Herkules.

USA

According to the results of the official hop acreage survey published by the US Ministry of Agriculture (USDA) on 1.6.2008, total hop acreage amounts to 15,437 ha. In comparison to 2007 this represents an increase of 2,927 ha. The CTZ group of varieties shows the highest increase with more than 1,200 ha, followed by Sum-

mit with 717 ha and some other alpha varieties whose acreage is reported to have risen by approx. 485 ha. The acreage planted with certain aroma varieties has also increased. Cascade in particular has seen its acreage rise by about 350 ha, followed by Willamette with an increase of nearly 120 ha. One variety that has lost ground is Galena, with approx. 160 ha.

The acreage expansion reported failed to meet expectations after inofficial estimates within the hop industry had suggested a figure of up to 3,600 ha. What is unclear is whether new acreage was planted after the acreage survey had been completed.

World

The changes in acreage reported may lead to an increase in acreage worldwide of up to nearly 6,000 ha. In the market-leading producer countries Germany, the USA and China, hop growers are responding to rising demand by increasing acreage. Virtually all of the new acreage is covered by long-term contracts.



BARTH-HAAS GROUP AWARDS RESEARCH GRANTS

Once again the Barth-Haas Group has awarded grants for research activities focusing on the use of hops and hop products in all areas of the brewing industry. Due to the number of applications submitted this year the

jury decided to support five instead of the four projects envisaged. The following projects were selected and receive a grant of 2,000 EUR each:

Stipendiary	Professor	University	Country	Title
Sivalakshmi Dharmaraj	Prof. Paul Hughes	Heriot-Watt University, Edinburgh	England	Development of a laboratory test for astringency: The role of hops
Dr. Frithjof Thiele	Prof. Elke Ahrendt	University College Cork	Ireland	Scanning Electron Microscope (SEM) examination on lupulin glands of different hop varieties
Luk Daenen	Prof. Freddy Delvaux Prof. Guy Derdelinckx	Katholieke Universiteit Leuven	Belgium	Characterization of newly identified aroma compounds in hops: DIHYDROE-DULANES and THEASPIRANES
Stefan Hanke	Dr. Markus Hermann	TU Munich	Germany	Research into additive and synergistic effects of hop aroma compounds
Michael di Pietro	Prof. Charles Bamforth	UC Davis	USA	The antioxidant efficacy of hop polyphenols

Conversion Table

Area:		Weight:	
1 hectare (ha) = 10,000 m ²	= 2.934 Bavarian „Tagwerk“	1 metr. ton (mt) = 1,000 kg	= 20 cwt (D) = 2,204.6 lbs
1 hectare (ha) = 10,000 m ²	= 2.471 acres	1 Zentner cwt (D) = 50 kg	= 110.23 lbs = 1.102 cwt (USA)
1 Bavarian „Tagwerk“	= 0.341 ha		= 110.23 lbs = 0.984 cwt (GB)
1 acre	= 0.4047 ha	1 hundredweight (cwt/USA)	= 100 lbs = 45.36 kg
			= 0.9072 Ztr.
Length:		1 hundredweight (cwt/GB)	= 112 lbs = 50.800 kg
1 yard	= 3 feet = 36 inches = 91.44 cm		= 1.0160 Ztr.
1 mile	= 1.609 km	1 centner (GB)	= 100 lbs = 45.36 kg
			= 0.9072 Ztr.
Volume:		1 kg	= 2.20462 lbs
1 hl = 100 l	= 26.42 gall = 0.8523 bbl (USA)	1 lb	= 0.45359 kg
1 hl = 100 l	= 22.01 gall = 0.6114 bbl (Brit.)		
1 barrel (bbl/USA)	= 31 gall = 1,1734 hl	Pressure:	
1 barrel (bbl/GB)	= 36 gall = 1,6365 hl	1 bar = 14.5038 psi	1 psi = 0.06895 bar
		$86^{\circ}\text{F} = \frac{(86 - 32) \times 5}{9} = 30^{\circ}\text{C}$	$30^{\circ}\text{C} = \frac{30 \times 9}{5} + 32 = 86^{\circ}\text{F}$

Currency Exchange Rates

1 EUR equals (reference by ECB):

	on 1 June 2007	on 2 June 2008		on 1 June 2007	on 2 June 2008
USA	1.3436 USD	1.5521 USD	Canada	1.4335 CAD	1.5460 CAD
Australia	1.6214 AUD	1.6243 AUD	Poland	3.8150 PLN	3.3809 PLN
China	10.2749 CNY	10.7607 CNY	Switzerland	1.6514 CHF	1.6182 CHF
United Kingdom	0.6793 GBP	0.7915 GBP	Czech Republic	28.2850 CZK	25.0300 CZK
Japan	163.8100 JPY	162.6400 JPY			

These exchange rates can only serve as an indication.

They vary from bank to bank and are not binding.

MEMBERS OF BARTH-HAAS GROUP



Joh. Barth & Sohn GmbH & Co. KG
Freiligrathstraße 7/9
90482 Nuremberg
Germany

Phone: +49 911 5489-0
Fax: +49 911 5489-330
E-Mail: info@johbarth.de
www.barthhaasgroup.com



John I. Haas, Inc.
5158 MacArthur Blvd, NW, Suite 300
Washington, DC 20016
USA

Phone: +1 202 777-4800
Fax: +1 202 777-4895
E-Mail: info@johnihaas.com
www.barthhaasgroup.com



Botanix Ltd.
Hop Pocket Lane
Paddock Wood
Kent, TN12 6DQ
United Kingdom

Phone: +44 1892 833415
Fax: +44 1892 836987
E-Mail: intray@botanix.co.uk
www.botanix.co.uk



Hop Products Australia
26 Cambridge Road
Bellerive
Tasmania 7018
Australia

Phone: +61 3 6282 2000
Fax: +61 3 6245 0970
E-Mail: info@hopproducts.com.au
www.hopproducts.com.au



Barth Haas (Beijing) Trade Co., Ltd.
Unit 26-28, Level 6
China World Tower 1 No. 1
JianGuoMenWai Avenue
100004 Beijing
People's Republic of China

Phone: +86 10 6590 7096
Fax: +86 10 6590 7095
E-Mail: jbsbj@163bj.com
www.barthhaasgroup.com



THE 40 LARGEST BREWING GROUPS WORLDWIDE AS AT 31.12.2007

The increase in the share of the world market held by the 40 largest brewing groups was disproportionately greater than the increase in beer output. This resulted from a combination of good beer sales volume and the by no means insignificant effects of brewery purchases, stakes in other companies and acquisitions. These very

activities produced a change at the top of the table. While the top three had a share of 36.6 % of world beer production in 2006, only one year later their share amounted to 37 %. This growth constitutes an increase in output of 40 million hectolitres.

Rank	Brewery	Country	Production vol. 2007 in mill. hl	Percentage of world beer production
1	SABMiller	United Kingdom	239.0	13.4 %
2	InBev (1)	Belgium	233.1	13.0 %
3	Anheuser-Busch (2)	USA	189.1	10.6 %
4	Heineken	Netherlands	139.2	7.8 %
5	Baltic Beverages Holding (BBH) (3)	Russia	55.3	3.1 %
6	Carlsberg (without BBH)	Denmark	52.9	3.0 %
7	Grupo Modelo	Mexico	51.0	2.9 %
8	Tsingtao Brewery Group	China	50.6	2.8 %
9	Molson-Coors	USA/Canada	49.2	2.8 %
10	Yanjing	China	40.1	2.2 %
11	Femsa	Mexico	39.4	2.2 %
12	Scottish & Newcastle (without BBH)	United Kingdom	28.0	1.6 %
13	Asahi	Japan	23.8	1.3 %
14	Kirin	Japan	23.7	1.3 %
15	Efes Group	Turkey	20.9	1.2 %
16	Diageo (Guinness)	Ireland	19.5	1.1 %
17	Polar	Venezuela	18.5	1.0 %
18	Chongqing Beer	China	18.0	1.0 %
19	Gold Star	China	17.6	1.0 %
20	BGI/Groupe Castel	France	17.4	1.0 %
21	Grupo Schincariol	Brazil	17.0	1.0 %
22	San Miguel Corporation	Philippines	16.9	0.9 %
23	Pearl River	China	13.7	0.8 %
24	Radeberger Gruppe	Germany	13.6	0.8 %
25	Grupo Mahou - San Miguel	Spain	12.6	0.7 %
26	Obolon	Ukraine	10.9	0.6 %
27	Foster's Group	Australia	10.9	0.6 %
28	Hite	South Korea	10.6	0.6 %
29	Beer Thai (Chang)	Thailand	10.5	0.6 %
30	Singha Corporation	Thailand	9.9	0.6 %
31	Petropolis	Brazil	9.0	0.5 %
32	Lion Nathan	Australia/New Zealand	8.5	0.5 %
33	Bitburger Braugruppe	Germany	8.4	0.5 %
34	Oettinger	Germany	8.3	0.5 %
35	Sapporo	Japan	7.8	0.4 %
36	CCU	Chile	7.6	0.4 %
37	Damm	Spain	7.6	0.4 %
38	Shenzhen Kingway	China	7.3	0.4 %
39	Suntory	Japan	6.9	0.4 %
40	Shanghai Suntory	China	6.4	0.4 %
TOTAL			1,530.7	85.6 %
WORLD BEER PRODUCTION 2007			1,787.0	100.0 %

1) Including proportional stake in Pearl River, China

2) Including proportional volume from stakes in Grupo Modelo, Mexico, and Tsingtao Brewery Group, China

3) Carlsberg and Scottish & Newcastle each with 50 % stake in BBH. As of 2008, 100 % held by Carlsberg.

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