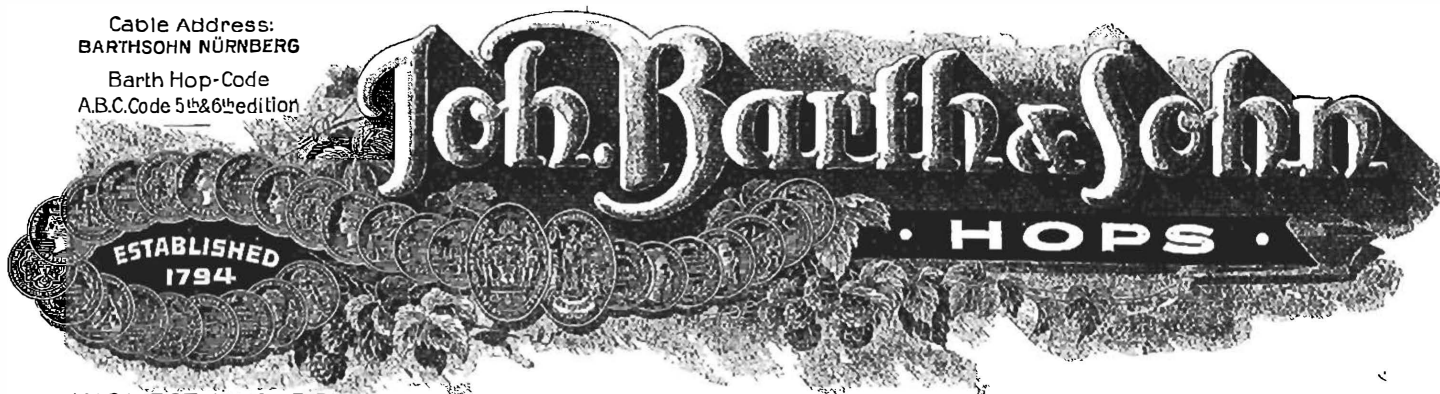


Cable Address:  
BARTHSONN NÜRNBERG  
Barth Hop-Code  
A.B.C.Code 5th & 6th edition



HIGHEST AWARDS  
at all Exhibitions.

Branch House at Saaz.

NUREMBERG, BAVARIA

June 20<sup>th</sup> 1931.

## Hop Report for 1930/31.

The World's economical crisis has aggravated in the course of 1930/31 and is affecting now all countries, most of them in a still increasing degree. Germany is suffering most of all from the continuing severe depression that caused unemployment up to an unforeseen extent (in February 1931: 5,045 millions of unemployed). The decrease in the entries of the Reich has led to burdening Germany's economical life with new taxes, in addition to the excessive ones already existing. The condition of German Agriculture continues to be sorely precarious in spite of all endeavours to improve it which must be considered essential for a possible restoration of German public economics. The custom barriers erected by many countries in consequence of overproduction, cause disturbances in the exchange of goods, so that it has become a necessity to look for new means of reviving the economical relations between the different countries.

The beer production of the various countries during the calendar year, or during the fiscal year 1930 respectively, and in the years mentioned, is to be seen from the figures below:

Beer Production.

### Production of Beer.

	1000 hectolitres		1000 hectolitres		1000 hectolitres
*Germany . . . . .	48486	*Mexico . . . . .1929	720	*Livonia . . . . .	89
*Great Britain . . .	30770	*Roumania . . . . .	632	*Panama . . . . .1929	81
United States of Amer.	28000	Jugoslavia . . . . .1929	600	Ecuador . . . . .	80
*France . . . . .	18314	Luxemburg . . . . .	600	*Estland . . . . .	69
Belgium . . . . .	15030	*New Zealand . . .1929	580	*Bolivia . . . . .	66
*Czechoslovakia . . .	11410	Chili . . . . .1929	560	*Egypt . . . . .	57
*Austria . . . . .	5083	*Norway . . . . .	525	*Bulgaria . . . . .	51
*Irish Free State . .	3663	*Hungary . . . . .	446	*Turkey . . . . .	41
*Australia . . . . .1929	3350	*Finland . . . . .	424	*Philippine Islands . . . . .1929	40
Russia . . . . .	3000	*British South Africa	323	*Congo . . . . .	32
*Sweden . . . . .	2982	*Cuba . . . . .	204	San Salvador . . . .	20
*Canada . . . . .1929	2793	Columbia . . . . .	200	*Paraguay . . . . .	19
Switzerland . . . . .	2610	*Uruguay . . . . .	152	Costa Rica . . . . .	15
Poland . . . . .	2472	*Peru . . . . .	144	Honduras . . . . .	12
*Netherlands . . .1929	2316	*Algeria . . . . .	140	*Guatemala . . . . .	11
*Denmark . . . . .	2291	*India . . . . .1929	118	Nicaragua . . . . .	10
*Argentine . . . . .1929	2132	*Lithuania . . . . .	115	Haiti . . . . .	5
*Brazil . . . . .1929	1766	*Venezuela . . . . .	111	Jamaica . . . . .	4
*Japan . . . . .1929	1633	Portugal . . . . .1929	100		
Italy . . . . .	812	*China . . . . .	96		
*Spain . . . . .	794	*Greece . . . . .	95	*official figures.	

In 1930 the **World's beer production** amounted to about 197,2 millions hl (1929: 204,2 millions hl). In the **United States of North America** the legal beer production is reported to be 5,185,461 hl near beer containing  $\frac{1}{2}\%$  of alcohol; the office of prohibition in Washington estimates the beer consumption for 1929 at 28.000.000 hl, other estimates are still higher. One liter of illegal beer costs 12,5 cents wholesale. Only a few countries, such as **Belgian Congo, Denmark, Finland, France, Greece, Ireland, Mexico, Netherlands, Norway, Sweden, Switzerland and Spain** state an increased beer consumption, whilst almost everywhere else the severe economical crisis has caused it to decrease, and is still falling. In **Germany** the production of 48.486.268 hl shows a decrease of 9.591 millions hl during the fiscal year (April 1st, 1930—March 31st 1931). The reduced consumption in **Austria** (in consequence of an elevation of the beer-tax by 70%) does not find its full expression in the above table; it amounts to 20% in January, 22% in February and 29% in March 1931. The decrease of beer consumption is largest in **Egypt, Bolivia, Bulgaria, Columbia, Cuba, Germany, German Austria, Esthonia, Great Britain, Guatemala, Italy, Lethuania, Rumania, Czechoslovakia and Hungary**.

In **Germany**, the decrease of beer consumption set in on May, 1st, 1930, on which day the increased beer tax came into force. The two Emergency Acts of July 26th and December 1st 1930 introduced new community beer taxes of from 7,50 to 10 Reichsmark per hl. Actually beer is charged in **Germany** with a fiscal tax of 12 Reichsmark and with a community tax of about 10 Reichsmark per hl.

But in spite of the new taxes increased by 46% in 1930, the surplus obtained during the fiscal year 1930 came up only to 14,8% of the estimates. The decrease of beer consumption, due to the augmented price of this beverage and also to the distressed economical condition of the people, has not yet stopped. During the first three months of this year it was 24,3% against the corresponding time of last year; the decrease is particularly great in wine-growing districts, where overtaxed beer has to compete with wine exempt from taxes.

The effect of the decreased beer consumption on agriculture, industries and trades connected with the brewing industry is disastrous. Numerous people have become ruined or are threatened in consequence of the diminished sale of their products. — The taxes which the above industries are no longer in a position to pay, and the reduced amount of taxes they pay on basis of a reduced income, result in a sum far superior to the surplus of taxes received. Therefore the excessive taxation of beer has proved, same as in **England**, a failure and its reduction is considered a matter of general interest.

Owing to a mild winter, the uncovering of the plants was done at an earlier time than usual. They proved to be perfectly healthy, and about the middle of May, when the tying-up of the vines began, they had reached a height of 0,50 to 1 meter and sometimes more. Many of the gardens, as in the preceding year, were again infected by downy mildew. Whilst in the second part of May there were frequent rainfalls, June brought dry weather and even summerlike temperatures. These favourable circumstances permitted the plants to develop well, reaping an advantage of about a fortnight against normal years.

The fleas which never fail to appear and which in Spring 1930 attacked the plants in even greater numbers than usual, were overcome by the rapid growth in **Bavaria** faster than in **Czechoslovakia**. At the beginning of June, the *Peronospora* showed itself here and there, but fell off in the course of the month, owing to dry weather and to spraying which was diligently applied in the **Hallertau** district.

**England** reported a rapid growth and favourable development of the plants in June, but also a strong infection by aphids; at the same time this vermin appeared in **Alsace, Belgium and Czechoslovakia**. For the first time downy mildew appeared in **Oregon** and especially in **Western Washington, Canada** notified the re-appearance of this disease.

In **Germany and in Czechoslovakia**, the plants in light soils began to suffer from the drought towards end of June. In heavier soils the plants were of unequal growth, nor did they become equal later on. This may partly be attributed to deficient manuring or to a total lack of it for want of money.

Mostly by midsummerday the plants had reached the top of the wires but in June 1930 this happened only in the very best gardens.

As early as June 18th, a fortnight sooner than usual, early hops began to blossom; on July 1st the bloom a pressing necessity.

From July 8th onwards, there was constant change of sunshine and heavy rainshowers. The temperature cooled off, becoming uncommonly low for this season of the year. Although the growth of the plants was somewhat slackened by these climatic conditions, on the other hand the thorough moisture of the soil was a necessity for their further development. *Peronospora* increased and was diligently combated by spraying, especially in the **Hallertau** district, whilst in the **Spalt** district, the **Aischgrund** and the **Hersbruck** hills little was done to fight the dangerous downy mildew.

Although wet weather had been prevailing since the beginning of July, the *Peronospora* did not spread in **Germany** to such an extent as was feared. This may be due not only to thorough spraying, but also to the low temperature all through July and August, unfavourable to the development of this pest, — as well as to frequent and violent storms refreshing the air in the gardens.

Towards August 20th, the weather ceased to be unsettled. Temperature began to rise which greatly favoured the development of the cones. The storms on August 14th and 16th caused great damage; moreover the plants were deteriorated by the second appearance of fleas that proved a greater

Consequences  
of the German  
Beer Tax.

Growth of the  
1930 Hop Plants.

plague in Czechoslovakia than in Germany. Although shortly before the picking began, the conditions of the plants everywhere were very unequal — almost every plant bearing perfectly developed cones together with blossoms in their earliest stage — it may be said — with the exception of Alsace and Belgium — the conditions in almost all hop-growing countries were satisfactory.

In the Tettwang district, picking partly began as early as August 3rd, whilst general picking in the Hallertau and in Czechoslovakia began on August 20th; in the Spalt and Hersbruck districts and in the Aischgrund it started on August 25th; in Wurttemberg Sept. 2nd, in Alsace from September 5th to 8th. Picking was favoured by most propitious sunny weather.

The official estimates in the middle of September 1930, stated 192,983 cwts. in Bavaria, and 221,047 cwts. in Germany. A comparison with the final figures of the crop proves the accuracy of the official estimates which may be due to the method adopted in September 1929.

On August 15th, 1930, before the picking, the International Hop Congress estimated the German crop to reach 205,500 to 223,000 cwts., the Czechoslovakian crop 185 to 197,500 cwts; the World's crop 1,049,000 to 1,094,000 cwts. The final estimates given in the following table, were compiled by the groups interested, with the assistance of the Bavarian Office for Statistics, on May 22, 1931.

The following table shows the figures of the 1928, 1929 and 1930 crops.

## World's Hop Acreage and Production.

Producing countries	Acreage Hectares			Yield per hectare in cwts. of 50 kilos each			Our estimate of the yields in 1000 cwts. of 50 kilos each			Official estimates in 1000 cwts. of 50 kilos each
	1928	1929	1930	1928	1929	1930	1928	1929	1930	1930
Hallertau . . . . .	7351	7708	6790	20,8	24,2	22,4	147,8	178	152,1	151,8
Spalt . . . . .	1753	1715	1641	10,5	9,3	13,7	17,6	16	22,5	19,6
Hersbruck . . . . .	2400	2276	1737	8,5	15,3	6,1	20,4	35	10,7	11,9
Aischgrund . . . . .	652	578	331	8,4	13,9	9,3	5,5	8	3,1	2,6
Jura . . . . .	580	569	117	6,9	12,3	7,6	4	7	0,9	1,3
Bodensee . . . . .			26			11,5			0,3	0,3
Other districts . . . . .			471			11,4			5,4	5,4
<b>Bavaria</b>	<b>12736</b>	<b>12846</b>	<b>11113</b>	<b>15,3</b>	<b>19,1</b>	<b>17,5</b>	<b>195,3</b>	<b>244</b>	<b>195</b>	<b>192,98</b>
Wurttemberg . . . . .	1803	1755	1485	11	22,2	13,6	20	39	20,2	17,92
Baden . . . . .	628	550	437	11,4	23,6	21,7	7	13	9,5	9,5
Prussia etc. . . . .	106	73	39	13,4	20,5	15,3	1,3	1,5	0,6	0,6
<b>Germany</b>	<b>15273</b>	<b>15224</b>	<b>13074</b>	<b>14,6</b>	<b>19,5</b>	<b>17,2</b>	<b>223,6</b>	<b>297,5</b>	<b>225,3</b>	<b>221</b>
Saaz . . . . .	12582	13362	11751	10,9	15,1	18,4	137,5	190	215	—
Auscha-Dauba-Raudnitz . .	3520	3478	3192	16,7	15,5	18,7	53,7	54	60	—
Moravia etc. . . . .	407	424	617	13,4	14,7	11,8	5,5	6	5	—
<b>Czechoslovakia</b>	<b>16509</b>	<b>17264</b>	<b>15560</b>	<b>12</b>	<b>15,1</b>	<b>18</b>	<b>196,7</b>	<b>250</b>	<b>280</b>	<b>—</b>
Alsace . . . . .	3040	2816	2028	16,4	32,8	14,7	50	92	30	38,4
Burgundy and Lorraine . .	1360	1308	974	11,6	24,4	6,1	15	32	6	11,5
Northern France . . . . .	410	450	332	48,8	41,4	7,5	20	17	2,5	8,9
<b>France</b>	<b>4810</b>	<b>4574</b>	<b>3334</b>	<b>17,6</b>	<b>30,8</b>	<b>11,5</b>	<b>85</b>	<b>141</b>	<b>38,5</b>	<b>58,8</b>
<b>Poland</b>	<b>3875</b>	<b>3600</b>	<b>3000</b>	<b>16,3</b>	<b>20,8</b>	<b>12,5</b>	<b>56</b>	<b>75</b>	<b>37,5</b>	<b>—</b>
Wojwodina . . . . .	9000	7000	1200	8,6	5	10,8	78	35	13	—
Slovenia . . . . .	3000	3000	1380	18,6	16	20	56	48	27,6	—
<b>Jugoslavia</b>	<b>12000</b>	<b>10000</b>	<b>2580</b>	<b>11,1</b>	<b>8,3</b>	<b>15,7</b>	<b>134</b>	<b>83</b>	<b>40,6</b>	<b>—</b>
<b>Russia</b>	<b>5265</b>	<b>5000</b>	<b>2000</b>	<b>10</b>	<b>6</b>	<b>12,5</b>	<b>30</b>	<b>30</b>	<b>25</b>	<b>—</b>
<b>Belgium</b>	<b>1470</b>	<b>1235</b>	<b>765</b>	<b>29,7</b>	<b>32,3</b>	<b>20,9</b>	<b>43</b>	<b>40</b>	<b>16</b>	<b>—</b>
<b>Various countries</b>	<b>600</b>	<b>600</b>	<b>500</b>	<b>10</b>	<b>15</b>	<b>10</b>	<b>6</b>	<b>9</b>	<b>5</b>	<b>—</b>
<b>Continent</b>	<b>59802</b>	<b>57497</b>	<b>40813</b>	<b>13,2</b>	<b>16,4</b>	<b>16,3</b>	<b>774,3</b>	<b>925,5</b>	<b>667,9</b>	<b>—</b>
England . . . . .	9633	9706	8092	28,4	41,5	33,8	265	400	274	257
<b>Europe</b>	<b>69435</b>	<b>67203</b>	<b>48905</b>	<b>15,3</b>	<b>19,7</b>	<b>19,2</b>	<b>1039,3</b>	<b>1325,5</b>	<b>941,9</b>	<b>—</b>
United States of America .	10562	10076	7891	28,9	29,7	29,5	290	300	233	212,7
Canada . . . . .	425	471	384	21,4	35,3	27,3	9	15	10,5	—
Australia and New Zealand	700	1000	700	25,7	40	28,5	18	28	20	—
<b>World's production</b>	<b>81122</b>	<b>78750</b>	<b>57880</b>	<b>17,2</b>	<b>21,1</b>	<b>20,8</b>	<b>1356,3</b>	<b>1668,5</b>	<b>1205,4</b>	<b>—</b>

Picking.

Estimates.

The favourable conditions of hop gardens in July 1930 created reserve among the buyers and the sinking of prices for 1929 hops up to the beginning of the new harvest. — The first Hallertau hops fetched 120 Reichsmark on August 11th, the first Tettwang early hops 110 Reichsmark on August 18th.

Prices of 1930  
Hops.

While the harvest was proceeding, the quotations in Nuremberg went down to 95 Reichsmark for Hallertau, to 100 Reichsmark for Tettngang hops. After the picking period in the Hallertau hops fetched 40—80 Reichsmark, in the Spalt district 65—90 Reichsmark.

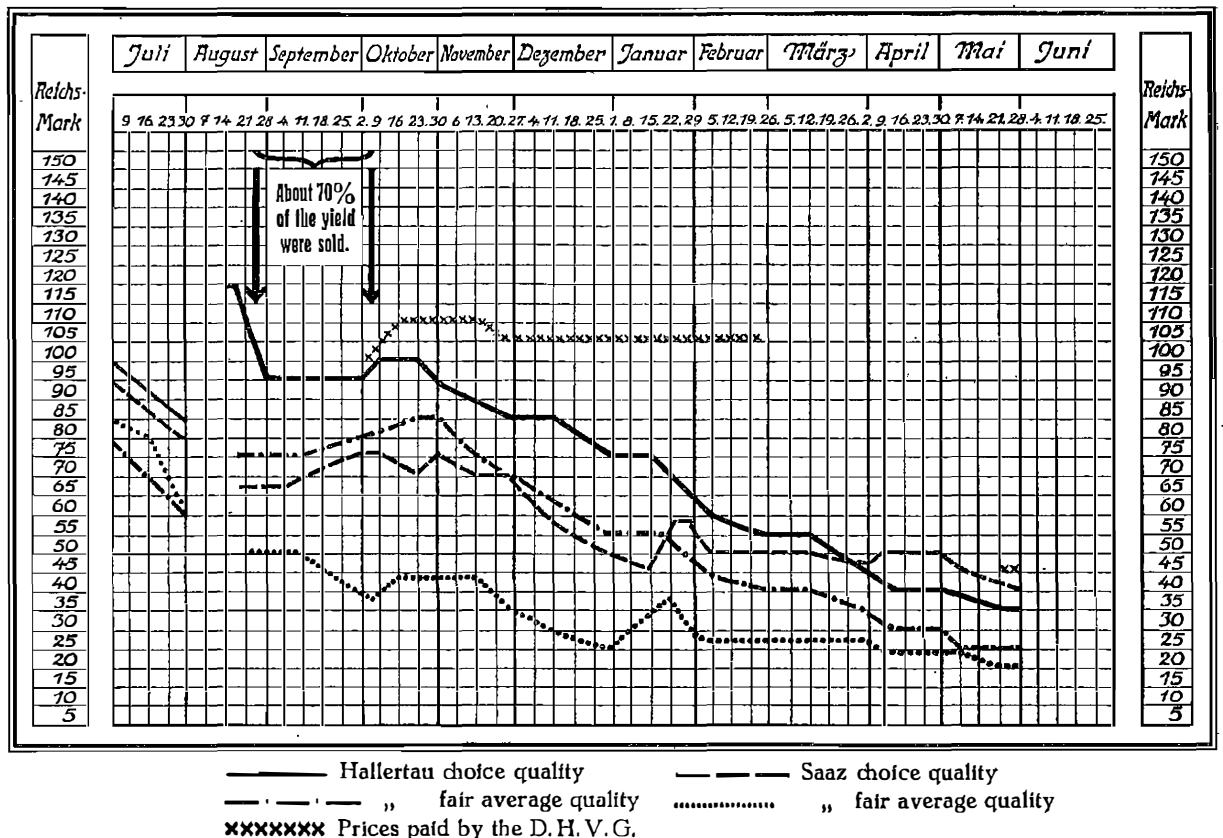
The intervention of the **Deutsche Hopfen-Verkehrsgesellschaft m. b. H.** (German Hop Traffic Company Ltd.) created a livelier demand; best Hallertau hops reached 100—110 Reichsmark. As early as the second part of October, demand slackened, and a regressive movement of prices set in, causing them to drop from 80—100 Reichsmark in October, to 20—40 Reichsmark in May.

The initial price paid in the Saaz district was 500 Kc. After the picking, the prices fluctuated between 350—525 Kc; in some cases selected hops fetched as much as 600 Kc. Middle of October, 65% of the crop were considered sold; demand declined and prices slowly sank down to 150—

Prices for Auscha hops set in with 250—350 Kc, rose to 400 Kc. and declined later on to 200 to 300 Kc.

The demand that in all hop-growing countries had set in immediately after picking proved to be quiet in Germany and in Czechoslovakia, whilst in Slovenia, Poland and Alsace it assumed shortly quite a tempestuous character until the middle of October, and then it suddenly fell off.

In the following we publish a table showing the movement of prices for 1929 hops in July 1930 and of 1930 hops. Prices to be understood per 50 kilos of best available and of middling quality Hallertau and Saaz hops; besides the prices paid by the D.H.V.G.



**Bitter Principle Analyses of 1930 hops.**

In the following table for the first time we have not inserted the percentage of water, as according to our opinion this depends less on the crop itself than on the amount of moisture in the air during the time of open storage and on the care of each single producer during the drying process.

The amount of bitter principle in 1930 hops is superior to that in hops of previous years; so Weihestephan stated higher average figures than in 1929, which figures show a plus of 2,2% in Hallertau hops, 1,5% in Auscha, and 1,4% in Saaz hops.

The well-known hop expert, Prof. Dr. Meindl, Weihestephan, has related that the amount of bitter principle in the hop cones is gradually increasing up to the moment of their full ripeness, and that, whilst towards the stage of full ripeness the aroma is gaining in intensity, it is losing in quality and mildness of flavour; from this is deduced that early-picked hops fall short as to the amount of bitter principle, but have an advantage over late-picked ones with regard to their flavour. On examining the amount of bitter principle present in the cones of several plants, he was able to verify that the amount of bitter principle found in the cones of the uppermost third part of the plant was by about 1,5% richer than found in the cones taken from the middle part of the plant, whilst again the latter contained by 1,5% more of bitter principle than the cones gathered from the lower third part, thus the product of one and the same plant showing differences up to 3% as to the amount of bitter principle.

**Drawing of Samples.**

At the Congress of the Central European Research Stations, in Pilsen, September 1930, Prof. Dr. Meindl proposed to adopt standardized methods as to how hops should be gathered for analysis.

On the occasion of this same Congress, the Committee for Analyses accepted Dr. W. Woellmer's method, designated as "Convention Analysis", to be applied as well as the Lindner-Adler method, for determining the amount of bitter principle.

The analyses of 1930 hops as to their amount of bitter principle, made by the Governmental Research Institute at Weihenstephan and at the Station for Scientific Research in Munich have produced the following figures to which we add those obtained in the three previous years:

Origin	1927	1928	1929	1930
	Bitter substance without water	Bitter substance without water	Bitter substance without water	Bitter substance without water
	%	%	%	%
Hallertau . . . . .	13,5—18,6	11,5—16,4	13,5—17,0	15,0—19,1
Spalt . . . . .	15,0—17,0	15,1—16,3	13,5—17,5	15,9—19,5
Aischgrund . . . . .	14,1	13,0	13,5	15,0
Hersbrucker Gebirge . . . . .	7,7—16,8	12,3—15,2	15,1—16,8	14,1—17,7
Wurttemberg . . . . .	13,4—19,2	13,8—15,0	14,4—17,9	15,2—18,3
Baden . . . . .	17,5—18,7	15,2	13,7—15,6	14,3—20,2
Auscha . . . . .	16,7—17,1	13,0—16,4	12,5—15,8	14,7—15,8
Saaz . . . . .	15,2—17,0	13,4—15,2	12,9—14,6	14,4—15,8
Alsace-Lorraine . . . . .	11,9—13,5	13,5—14,1	15,3	15,3
Styria (Goldings) . . . . .	14,2—15,6	10,6—12,4	13,9—15,4	15,6—16,7
Backa . . . . .	15,2—17,0	7,5—16,4	14,8—14,9	14,9
Poland . . . . .	13,3—15,1	13,1—14,6	1	15,7—16,4
Russia (Volhynia) . . . . .	13,8*	13,3—13,6*	14,0	—

\*air dry

It may be hoped that henceforth the drawing of samples, as well as their analyses, will be effected uniformly in the World according to the established methods, thus contributing to eliminate the differences in the results obtained from several analyses made on the same hops.

The wish for gaining cooperative influence on the formation of the prices became pressing in the German Hop Growers Association when stating, after the picking, that the prices were far below the cost-price.

On September 30th, 1930, the German Hop Traffic Company Ltd. was registered with a capital of 20.000 Reichsmark with the aim of promoting the sale of hops. The Bavarian Diet granted a guarantee up to 1 million Reichsmark for possible losses caused by purchase and sale of hops of the 1930 crop. In the period between October 1930 and February 1931 the Company bought 3.200 cwts. at prices ranging from 80 to 110 Reichsmark. But their intervention could not prevent the general decline — as may be seen from the table on page 4 — as from 100 Reichsmark in October prices fell to 55 Reichsmark in February.

German Hop  
Traffic Company  
Ltd. (D.H.V.G.)

Simultaneously with the prices paid by the D.H.V.G., much cheaper prices were quoted in the Nuremberg market for hops of the same quality. These parallel quotations came to an end when the means granted by the Government were exhausted; of the sum originally provided for the purpose, only 300.000 Reichsmark were paid. The failure of the D.H.V.G. is a consequence of their financial weakness.

The long negotiations preliminary to the foundation of the Company and to the initiating of purchases in the Nuremberg market had caused the Brewers and Traders to supply themselves abundantly with the quantities presumably needed, as a buyer subsidized by the Government was sure to cause prices to rise. The lively demand at the beginning of October created the expected but only temporary rise in the prices. In former years the buying began in October and continued throughout several months so creating a continuous regular demand. In this instance the above-mentioned purchases, effected within a relatively short space of time, were the cause of dull markets afterwards, because when the purchases at prices artificially kept at a high level came to a standstill for lack of means, the market prices fell quickly to the international level.

As at the end of the year first-rate Saaz hops were available at 60 to 70 Reichsmark, the foreign consumers of course preferred them to the German hops which were higher in price. It was only later on that the D.H.V.G. saw the importance of export trade.

At the end of May the D.H.V.G. received further 200.000 Reichsmark for the purchase of 3500 cwts. which were taken up at prices ranging from 20 to 50 Reichsmark, bringing the unsold stocks to 4200 cwts.

Greater attention should be given to the fact that quotations of hops will always follow the price-movement in the competing countries. Very large means would be required to keep out of the consequences of the natural laws of offer and demand which, we mean, would at length be possible only in a country without export and import thus being independent of the international price-formation.

A similar attempt to support prices — but with larger means — has been made in Czechoslovakia. The Czechoslovakian Hop Syndicate in Saaz, was formed on Dec. 8, 1930, with a capital of Kc. 1.200.000.— which received guarantees from the State and the Hop Growers Associations, up to Kc. 15.000.000.—; further Kc. 5.000.000.— are expected. Up to the middle of May 1931, the Syndicate has bought about 25.000 cwts. of Saaz hops at prices from Kc. 330 to 450, about 7.000 cwts. of Auscha, Raudnitz and

Czechoslovakian  
Hop Syndicate  
Ltd., Saaz.

Trschitz hops from Kc. 280 to 350, and 750 cwts. of Dauba hops at Kc. 270. Such growers who have already reduced their acreage received preference.

It is said that the Syndicate intends buying up all stocks lying unsold at the producers', before the beginning of the new harvest; these stocks are valued at 17.000 cwts. of Saaz hops, and 3.000 cwts. of Auscha-Raudnitz-Dauba hops; local trade is estimated to possess further 13.000 cwts.

It appears that the Czechoslovakian Government intends subsidizing hop culture in the future, in order to help it to overcome the present crisis. For this reason the reduction of the acreage will be effected at a slower pace than elsewhere. Governmental subvention will enable the producers to work more efficiently, thus undoubtedly giving them an advantage over their competitors in other countries whose Governments cannot afford equally high subsidies.

Such liberal and far-sighted action in favour of so vital a branch of the Country's Agriculture is costly and must in order to bear the golden fruits expected in the long run, be carried on until the end of the crisis.

The prices of the 1929 crop, as is known, were already below the cost-price; German and Czechoslovakian best sorts were sold from 70 to 100 Reichsmark and the prices for hops from other districts were correspondingly lower, even as low as 20 Reichsmark. These miserable prices led to a reduction of the acreage in 1930 in Germany by 14,1% to 13.074 hectares against 1929; in Czechoslovakia by 9,8% to 15.560 hectares, and in the whole of Europe by 27,2% to 48.905 hectares. The 1930 crop — with the exception of Czechoslovakia — was smaller than the 1929 crop, but met with large brewery stocks in almost all countries. They were far bigger than expected on account of the diminished beer consumption in consequence of the World's economical crisis. The stocks in the German breweries amounted to 183.940 cwts. or 91,8% on August 1., 1930.

During the harvest 1930, 40 Reichsmark and even less were paid for inferior quality hops, so that at home and in foreign countries large quantities were not gathered as in many cases the prices offered did not even pay the picking and drying expenses. As already mentioned, the initial prices of 80 to 100 Reichsmark gradually dropped to 15—35 Reichsmark, inferior qualities fetched still lower prices, for lack of demand, the World's Brewing Industry being over-saturated with hops.

The bad sales of the 1929 and 1930 hops below the cost of production, and the ensuing reduction of the acreage have caused enormous losses to the hop-growers in all countries; resulting in a reduction of the World's acreage from 81.122 hectares in 1928 to 57.880 hectares in 1930, and probably to 50.000 hectares in 1931. Round 40% of the hop-gardens existing in 1928 were grubbed and the respective working implements were proportionally reduced in value.

The crisis of the prices and overproduction has led to the following measures in the different countries:

**Germany:** Endeavours to raise the duty to 150 Reichsmark by annulling the hop-tariff with Belgium. Purchases of 6 700 cwts. of 1930 hops by the D.H.V.G. Compulsory consumption of inland hops. Reduction of the acreage to 11.000 hectares in 1931 following the decreasing beer-production.

**Czechoslovakia:** Purchases of 33.000 cwts. by the Czechoslovakian Hop Syndicate (further 20.000 cwts. are still to be bought). Reduction of the acreage to 11.200 hectares in 1931.

**France:** Continued efforts to raise the import duty and to obtain compulsory consumption of inland hops. Considerable reduction of the acreage. (The department Bas Rhin in 1931 viz by 15% to 1.800 ha). Appointment of a Commission representing the Brewing Industry, Trade and Production to examine the distressed conditions of French hop culture and adequate means of relief.

**Hungary:** Increase of import duty from 20 to 200 Gold Crowns per 100 kilos. Reduction of the acreage to 190 hectares in 1931.

**England:** Efforts to secure compulsory consumption of inland hops through the "British Beer Bill". Producers expect to obtain better prices by organising cooperative sale by means of a "Marketing Bill".

**Canada:** Doubling of the import duty.

**Belgium und Jugoslavia:** Further considerable reductions of the acreage, by 10% in each of these countries (Slovenia 1931 to 1.173 ha).

**Poland:** Reduction of the acreage by 10—15%.

It is not possible to state in figures which part of the world's hop-acreage has not been cultivated and naturally the amount of the crop will be greatly influenced by this fact. A large part of the coming crop will be left unpicked if the prices paid during picking time do not overlap the outlay (picking, drying and sale).

One cannot help feeling sincere sympathy with the hard fate of the hop-growers, generations of whom were and will be subject to the changing fortunes of this branch of agriculture, and who actually suffer from so severe a crisis as had never before afflicted them, often beyond their limits of possible endurance. No produce can be sold at prices below the cost-price on the long run. The only means of salvation from further losses is the decrease of the acreage following the reduced beer-consumption. Since 1930/31, overproduction has made a general reduction of acreage necessary. Further reductions ought to be effected, first of all by growers of inferior sorts of hops, and also by those countries, misjudging their economical possibilities, having excessively increased their acreage without sufficient inland consumption.

The outlook for the coming economical year is not very bright. Abundant stocks, regressive beer-consumption will continue to unfavourably influence the markets. Therefore augmented care must be

Overproduction  
of Hops and  
Ensuing  
Catastrophe.

given to growing, picking, and drying, for only by delivering first-rate hops a grower may improve the sale of his product.

Carefully established statistics, by the President of the German Hop Growers' Association, indicate the total amount of hops available (stocks and 1930 crop) in Germany on October 1, 1930 have been round 440000 cwts. On the other side 207.000 cwts. are needed, calculating a beer consumption of round 45 millions of hectoliters from October 1, 1930 to September 30, 1931. A surplus of 10.000 cwts. for exported hops may be added, and it results that the hops on hand in Germany on October 1, 1931 — apart from the new crop — will still amount to approximately 223.000 cwts, i. e. about 107% of the coming year's presumable consumption.

By end of May 1931, the stocks of fine quality hops left over from the 1930 crop in Central Europe, viz. Alsace, Austria, Czechoslovakia, Germany, Jugoslavia and Poland amount to 48.000 cwts. One must add further 4.200 cwts. of the German and 33.000 cwts. of the Czechoslovakian Hop Syndicate, altogether 86.000 cwts.

Stocks of the 1930 crop.

The 1930 crop of the afore-mentioned countries was 620.000 cwts. The world probably needs 500.000 cwts. of fine quality hops if the consumption does not still fall off, wherefrom may be concluded that the stocks of fine quality hops in the world's brewing industry were enlarged by further 30.000 cwts. On August 1, 1931, they will be, together with the stocks accumulated from the crops 1927—1929, higher than one year's consumption.

When reporting of the German crop we must allot well-deserved praise to the **Hallertau district**. It may fairly be said that contemporary hop culture has reached its acme of perfection in the above district; the intelligent industry of the growers, helped by official scientific advice, their scrupulous care during the periods of growth, picking and drying, have generally furthered a product of rare superior quality, of almost equal green colour, rich in bitter principle, picked and treated in a consummate fashion. This is especially to be emphasised, taking into account that Hallertau hops more than any other sort are subject to infection by downy mildew.

The 1930 Crop in Germany.

With an acreage reduced by 918 hectares, the crop is by 26.000 cwts. less than it was in the preceding year. The 1930 product gave a yield of 22,4 cwts. per hectare, against 24,2 cwts. in 1929. As to bitter principle, with an average of 17,3%, it showed a figure by 2,2% superior to that stated the year before. Best favoured were the districts of Au und Wolnzach. About 3% remained unpicked on account of their having become discoloured.

As to the renowned **Spalt** hops, we are sorry to have to state that only a few producers followed the advice of experts as to combating diseases and as to treating the product. Most of the producers there have been taught a lesson by the difficulties they met with selling their hops of inferior colour, so as to leave them convinced of the necessity to take measures different from those used by their forefathers. With regard to the improvement of quality of German hops it is desirable that such producers as are not willing to keep pace with the progress of science and technics should give up hop growing. In consequence of the *Peronospora* insufficiently or not at all combated, and of frequent storms, the 1930 **Spalt** hops were more or less warped in cones and impaired in colour, so that this sort — much demanded by the international Brewing Industry on account of its delicate mild flavour — could be sold only with difficulty. The picking of the 1930 **Spalt** hops in many cases left to be desired. Some few **Spalt** growers harvested a highly-valued and excellent product, by which was proved the possibility of obtaining good results in the said district. About 3.000 cwts. were not gathered at all.

In many gardens of the **Hersbruck Hills** and in the **Aischgrund** the hops were of reddish colour, because spraying had been omitted. In the hilly districts about 10.000 cwts. were left unpicked, having become deteriorated by the *Peronospora*.

In the hop-growing parts of **Wurtemberg**, a green product was mostly harvested, rich in bitter principle, that met with an increasing demand. Specially favoured were the countryside near **Tettngang** and **Herrenberg**, whilst the **Rottenburg** country was damaged by hailstorms.

In **Baden**, about 10% of the hops grown remained unpicked, having been impaired by hail.

The law concerning the origin of hops, passed in 1930, has caused a decrease of demand in **Baden**, the **Aischgrund**, and the **Hersbruck Hills**.

In the **Altmark** (Prussia), hop culture, introduced there by **Frederik the Great** in 1751, has shrunk to an acreage of only 2 hectares.

Quality was judged as follows:	first-rate	middle	inferior
	%	%	%
Hallertau . . . . .	40	50	10
Spalt . . . . .	10	35	55
Hersbruck . . . . .	10	35	55
Aischgrund . . . . .	10	35	55
Wurtemberg . . . . .	40	35	25
Baden . . . . .	20	40	40

	Imports	Exports
1 st Sept. 1928—31 st Aug. 1929 . .	85.702 cwts.	40.088 cwts.
1 st Sept. 1929—31 st Aug. 1930 . .	57.506 cwts.	46.894 cwts.
1 st Sept. 1930—30 th Apr. 1931 . .	55.608 cwts.	65.862 cwts.



During the early period of growth, the plants in many gardens in the Saaz district suffered from fleas from which they were never quite able to recover. In June, and during the first part of July, the growth was hampered by extraordinary heat and drought. Then, as in Germany, in the middle of July a period of cold, rainy weather set in which bestowed new vigour to the plants and proved greatly favourable to the formation of the cones. Plants with but poor leaves and even very weak plants produced disproportionately large quantities of cones. In the first part of August the Saaz district was repeatedly visited by violent storms which not only broke down numerous wire-work in open fields, but caused damages also in gardens situated in valleys apparently well protected from winds.

In Saaz, the picking proceeded from August 20 th to September 8 th, in very favourable weather conditions, with exception of 4 rainy days at the beginning. There were plenty of hands available. The originally stipulated wages of 1,40 Kc per 30 liters of green hops were not adhered to, but had to be raised to 1,50 Kc and more. As regards their daily food, the pickers receive their coffee in the morning and  $\frac{3}{4}$  to 1 kg of bread per day.

3,000 cwts. severely deteriorated by the storms and by fleas remained unpicked.

The best results were obtained in the Czechian Wood Districts (Podlesí) and in the German Wood District (Tuchorschitz, Satkau and Teschnitz) as well as in the lower Goldbach Valley, whilst the hops grown in the outside districts and in the lower part of the Eger River, were not satisfactory. The 1930 Saaz product was of better quality and richer in bitter principle than that harvested the year before; whilst in 1929 there were required 90 to 100 measures of 25 to 30 liters each for making up one cwt. of dry hops, 85 such measures on an average were enough in 1930.

In spite of the Saaz growers being very susceptible to criticism, we feel compelled to remark that the colour of 1930 Saaz hops frequently did not quite come up to expectation, nor did the cones, less equal in size than in the previous years, give full satisfaction. The picking of Saaz hops wants improving, as only too frequently these hops require a supplementary treatment which is an inconvenience to buyers. That which is possible in other hop-growing districts, such as the Hallertau, Poland, Slovenia, should be obtainable also in the Saaz district, the product of which aspires to ranking first in the world on account of its superior quality and universally appreciated flavour.

It is a mistake to think that all the gardens in the Saaz district are stocked uniformly. The old plantations are estimated to be stocked with 6,400 plants per hectare, whilst gardens with 5,400 plants are rare, contrary to the general opinion which considers them the average, which may explain the often erroneous, widely differing crop-estimates. Estimate 15th of August 1930 135—145,000 cwts., crop result 215,000 cwts.

In the Auscha-Raudnitz districts the development of the plants was prejudiced by fleas. Some scanty gardens were to be seen in several parts, but owing to moist weather during the period of the formation of the cones, these developed luxuriantly, and the second appearance of fleas did not do them much harm. Picking began on August 14 th. Auscha Greenhops were mostly not harvested at all; of Auscha Redhops about 200 cwts. were left unpicked. As to quality, the 1930 Auscha-Raudnitz hops were better than in 1929, small or little-sized, but less fine in colour, which may partly be due to the storms before the picking period, partly to the damages caused by the fleas. 45 to 50 measures (of 50 liters each) of Auscha hops, or about 60 measures of Raudnitz hops made up one cwt. of dry hops.

Within the Auscha district, especially favoured were the communities on the Polep Platte: Brzehor, Kuttendorf, Giesdorf, and Polep, and also the Kelch district.

In the Auscha district, the plants grown on wires are set at a distance of 140×120 cms. (equal to 6,000 plants per hectare), those grown on poles 120×110 cms. (equal to 7,000 plants per hectare).

In the Dauba Greenland picking began on September 1 st. Of about 6,000 cwts. only about 4,500 cwts. were gathered which fetched initial prices of 175 to 200 Kc.

Quality was judged as follows:	first-rate	middle	inferior
	%	%	%
Saaz . . . . .	10	60	30
Auscha . . . . .	15	60	25
Raudnitz . . . . .	15	60	25
Dauba . . . . .	10	60	30
		Imports	Exports
1 st Sept. 1928—31 st Aug. 1929 . .		10,775 cwts.	132,168 cwts.
1 st Sept. 1929—31 st Aug. 1930 . .		179 cwts.	183,769 cwts.
1 st Sept. 1930—28 th Febr. 1931 . .		—	153,209 cwts.

France.

In Alsace-Lorraine, during the year 1930 the acreage was reduced by 28%. The growth of the plants was hampered chiefly by fleas and hailstorms. Spraying was done twice, as a prophylactic against the Peronospora. Picking lasted from September 5th to 20th. The product harvested proved to be of good quality and colour, but of smaller cones than in former years. About 5,000 cwts. were not gathered at all. The small crop found a quick sale, at prices fluctuating between frs. 200 and 300; for Ausstich hops, prices as high as frs. 350 to 400 were paid in some single cases. The present prices are frs. 150 to 250 with few hops left.

Burgundy. The acreage was reduced by one third. Only the tenth part of a normal crop was picked. In the Department Nord (Flanders) a considerable reduction took place. Only one third of the total crop



grown was gathered; two thirds were left unpicked on account of the low prices. A further decrease of acreage is planned. With a yield of 17 cwts. the cost of production is estimated frs. 598 per hectare.

French hop growers are persistently trying to improve the distressed condition of their hop market by getting an increase of the import duty (actually 125 frs. per 100 kilos), which duty was assessed by the commercial treaty with Czechoslovakia, July 2nd, 1928; they are further aiming at a reduction of the imports. They anticipate a decrease in exports as a consequence of the expected increase of the German import duty on hops, to 150 Reichsmark per 100 kilos, an apprehension that to us seems absolutely unfounded, as during the last few years French hops were bought by Germany exclusively as transit goods. They are demanded by the world for cheaper beers, whilst the higher priced sealed hops of Germany and Czechoslovakia are wanted for the first class types.

The French Brewing Industry considers the gradual improvement of quality the only means of preventing the periodical crises afflicting French Hop Culture. In order to aid, the French Minister of Agriculture promised to take into view the introduction of a bounty on hop growing and perhaps, for the purpose of creating the required funds, to assess a statistical fee to be paid on beer. A triple commission has been nominated to look into these questions.

Quality was judged as follows:	first-rate	middle	inferior
	%	%	%
Alsace . . . . .	40	50	10
Burgundy . . . . .	25	50	25
Department Nord . . . . .	15	70	15

	French imports of hops	French exports of hops
1928:	39.216 cwts.	32.768 cwts.
1929:	41.736 cwts.	31.184 cwts.
1930:	40.970 cwts.	24.218 cwts.

The ripening of hops was prejudiced by storms and heavy rainfalls. Fleas had caused damages in spring and did so again before the picking period began. During the growth the plants were infected by lice which in Galicia caused black mould, thus diminishing the yield. The Peronospora manifested itself, but was not combated. During the picking period which in Congress-Poland, Galicia and Volhynia began on August 15th, in Great Poland (Neutomischel) towards the end of August, mostly unfavourable weather was prevailing, so that in general the colour did not prove satisfactory, whereas the cones were of more equal size and of better quality than in 1929. Inferior quality hops were not picked, i. e. about 35 to 40 % in Volhynia, about 30 % each in Congress-Poland and Galicia, and about 15 % in Great Poland. From 1929 to 1930 the acreage was reduced from 3.600 to about 3.000 hectares, and since then by further 10—15 % approximately.

Poland.

Quality was judged as follows:	first-rate	middle	inferior
	%	%	%
Volhynia . . . . .	25	25	50
Congress-Poland . . . . .	50	30	20
Galicia . . . . .	30	20	50
Great-Poland . . . . .	25	50	25

	Imports to Poland	Exports from Poland
1 st Sept. 1924—31 st Aug. 1925	7.162 cwts.	8.440 cwts.
1 st Sept. 1925—31 st Aug. 1926	2.948 cwts.	10.440 cwts.
1 st Sept. 1926—31 st Aug. 1927	3.576 cwts.	21.720 cwts.
1 st Sept. 1927—31 st Aug. 1928	5.610 cwts.	39.164 cwts.
1 st Sept. 1928—31 st Aug. 1929	4.558 cwts.	49.044 cwts.
1 st Sept. 1929—31 st Aug. 1930	4.450 cwts.	49.298 cwts.
1 st Sept. 1930— 1 st Apr. 1931	5.546 cwts.	31.584 cwts.

Wojwodina. Favoured by good weather, undisturbed either by vermin or any disease, the crop was able to grow and to ripen well; but on account of the bad prices only 65 % were picked. The product was green in colour, but of a lighter quality than in 1929; the cones mostly from middle-sized to small. It met with a quick sale, at initial prices of 250—300 Dinars, which later on rose to 450—400 Dinars per 50 kilos.

Jugoslavia.

Also in Slovenia the plants were able to develop under most favourable circumstances, so that picking was able to take place between August 6th and 23rd, a fortnight earlier than usual. The total crop was harvested. It proved to be of excellent colour and heavy quality — although the cones were not quite equal in size — and from all sides met with an eager demand. Slovenian hops initially fetched 250 to 300 Dinars; but prices rapidly rose to 500 Dinars and higher. Shortly after the harvest the total crop of about 27.000 cwts. of these rich fine goldings was almost entirely disposed of.

Quality of the Wojwodina (Backa) hops: 60 % first-rate 30 % middle 10 % inferior

Quality of Slovenian (Styrian) hops: 60 % first-rate 30 % middle 10 % inferior

	Imports to Jugoslavia	Exports from Jugoslavia
1928:	1.800 cwts.	153.580 cwts.
1929:	1.975 cwts.	65.945 cwts.
1930:	1.516 cwts.	54.125 cwts.

Russia.

Deficient payment for the 1929 hops delivered by the producers to the Fiscal Hop Culture Association, and the progressive thinning of the ranks of German and Czechoslovakian hop farmers — an accompanying circumstance of Soviet Russian agrarian politics — have brought on a further decrease of the acreage in Soviet-Volhynia. At least three-fourths of the gardens existing in 1928 are said to have been ploughed up in the course of the last two years. As to the product itself, in consequence of the continuous drought, it was both in quantity and quality inferior to that of 1929.

The meagre crop and presumably the apprehension of a further decrease of the acreage, induced the Government to augment the hop prices. In 1930, the Hop Culture Association valued 16 kilos of first-rate hops at 42 Rubel, of second quality hops at 36 Rubel, of third quality hops at 13.50 Rubel against 32 Rubel for first-rate and 22 Rubel for second quality in the year before (1 Rubel equals to 2,16 Reichsmark).

In the course of the year 1930, 3,049,800 hectoliters of beer were produced in about 130 Soviet Fiscal Breweries.

Belgium.

Since 1928 the acreage has been considerably decreased on account of the bad prices, especially in the Poperinghe district. A law prohibiting male plants to be grown has caused an improvement of quality.

Whilst in the Alost district, the whole crop was picked between September 8th and 28th, in the Poperinghe district about two or three fourths are said to have been left on the fields (the picking there lasted from September 4th to September 20th). The Peronospora manifested itself during the growing period without being combated. As to colour and quality, the product came up to that gathered the year before.

The acreage has again been reduced and is actually estimated to be 445 hectares in Poperinghe and 265 hectares in Alost.

Quality was judged:	Alost:	25 % first-rate	50 % middle	25 % inferior
	Poperinghe:	80 % first-rate and middle		20 % inferior

	Imports to Belgium	Exports from Belgium
1928:	58.774 cwts.	13.002 cwts.
1929:	58.462 cwts.	4.076 cwts.
1930:	65.060 cwts.	3.360 cwts.

England.

In spite of poor manuring and of an acreage reduced by 4,000 acres against 1929, exceptionally favourable growing conditions brought a record crop. The aphid fly and Peronospora had to be fought against in the southern districts.

Picking went on from the beginning of September until the second week in October. The wonder crop was estimated to amount to 320,000 cwts. or more, of which only 270,000 cwts. were gathered, the quantity of ungathered hops is calculated to be about 50,000 cwts. or about 17 % or 3,500 acres of the total acreage. The average yield amounted to 16 cwt. per acre against an average yield of 12,3 cwts. within the last ten years. In the northern counties of Worcester and Hereford almost the entire crop was picked. These districts were not infected by downy mildew, whilst in the southern counties of Kent, Hampshire and Sussex the hop types Bramblings, Farnhams, Tuthams, and also Fuggles, up to now considered immune, were partly seriously deteriorated. Colour was not as good as in 1929, but the brewing value was judged superior by 7—10 %.

After the picking, demand was very quiet. Prices set in with 80 to 100 sh for the well-grown East Kent Goldings, and in November rose to from 95 to 140 sh. The greater part of the crop harvested in the Kent, Mid-Kent, and Sussex districts was disposed of at prices between 35 to 100 sh, mostly at 35 to 60 sh, according to the offers of the producers. The sometimes overvalued Worcester Fuggles set in with 85 to 95 sh in October, rose to 105 and 115 sh in November/December, and in April were offered at 45 to 112 sh. Worcester-Goldings set in with 115 to 125 sh, in November/December, rose to 140/155 sh, again to be offered in April 1931 at 100 to 135 sh.

On December 16, 1930, in the Imperial Cold Stores, Tottenham, a great fire totally destroyed 10,000 cwts. of hops stored there, and seriously damaged 3,000 cwts. The re-filling of these stocks made the prices rise by 10 sh.

It is also to be mentioned that some producers experienced losses by their hops having become contaminated with arsenic when being dried and cured in open kilns. In England, insurance is possible for the risk of hops being unmarketable.

At the end of April 1931, the stocks of 1930 hops were reckoned to be about 10,000 cwts., approximately half of them about 4,000 pockets Worcester hops; furthermore 30,000 cwts. of 1929 hops.

The introduction of a „Marketing Bill,, is planned by the Government which considers the possibility of giving to the majority of hop-farmers a given commodity and the right to form an organisation with power to bring in recalcitrant minorities. This cooperative selling-scheme, inducing the growers to hope for better prices, prevented them from reducing the acreage in spring 1931, so that a normal crop in 1931 will again fetch low prices. Should a compulsory Association, embracing all English hop growers, be constituted, it could not come into action before the 1932 crop. Success in the long run would be possible only on condition that the acreage, the quantity of the crop and the selection of the types to be grown, should be regulated in a compulsory fashion.

Quality of the 1930 crop: 15 % first-rate      60 % middle      25 % inferior.

	Imports to England	Exports from England
1 st Sept. 1928—31 st Aug. 1929 . .	89.173 cwts.	18.000 cwts.
1 st Sept. 1929—31 st Aug. 1930 . .	52.393 cwts.	28.113 cwts.
1 st Sept. 1930—30 th Apr. 1931 . .	40.436 cwts.	14.196 cwts.

The acreage 1930 of 19,500 acres was by 5,400 acres smaller than in 1929. Cold, windy and at times also wet weather prevailed in spring. In Oregon and Western Washington, vermin was traced during the early period of growth. The *Peronospora* appeared there for the first time, against which only a few important growers applied spraying. The crop in Western Washington was reduced to 25 % in consequence of the damages caused by the peronospora. In Washington, picking took place in warm and dry weather; in Yakima between September 4th and October 1st, in Oregon between August 18th and September 25th. While the whole crop was gathered in Washington, in Oregon about 3 % remained unpicked. With the exception of the Western Washington hops, the quality of the 1930 crop was judged to be better and the hops to be of a finer green colour than in 1929. The average yield per acre was 2,250 lbs. in Yakima, 1,000 lbs. in Western Washington, 1,025 lbs. in Oregon and 1,650 lbs. in California. The best yield was obtained in the higher regions of Yakima.

U. S. A.

From October to April, prices fluctuated between 9 and 15 cents for Oregons and Californians, between 12½ and 15 cents for Yakimas.

Owing to the very small stocks stated Mid-May 1931 — i. e. 10,079 bales of 1930; 10,257 bales of 1929, and about 5,000 bales of 1928 hops, viz. in all about 25,000 bales — there resulted very firm markets and rising prices. At the begin of May, in Oregon and Washington up to 18 c were asked and paid; further rise of prices is possible on account of the small stocks. Also in the U. S. A. contracts prevent a free development of prices to the prejudice of producers. The producers of “near beer” and the home breweries make use of larger doses of hops than is usual in Europe. Hop consumption in the U. S. A. is increasing from year to year, and is actually estimated to reach 27,000,000 lbs.

A further reduction of acreage for 1931 is not expected to take place, as, for the present, hops pay as well as any other product grown. In Oregon, an increase of the acreage is intended although in 1930 it was reduced by 3,000 to 14,500 acres. The hop sorts in Oregon consist (each) 15 % of early Fuggles and Clusters and (70 %) of late Clusters. — California states a new increase of 293 acres after having reduced to 3,300 acres in 1930.

The “Wickersham” Report, eagerly looked forward to from all sides, disappointed by leaving unsolved the Prohibition Problem agitating the whole country.

Quality was judged:	first-rate	middle	inferior
	%	%	%
Yakima . . . . .	50	45	5
Western Washington . . .	50	30	20
Oregon . . . . .	60	30	10
California . . . . .	50	30	20

	Imports to U. S. A.	Exports from U. S. A.
1928 :	579,000 lbs.	7,985,000 lbs.
1929 :	764,000 lbs.	7,677,000 lbs.
1930 :	1,098,000 lbs.	7,640,000 lbs.

During the period of growth, the plants suffered from their chief enemies: fleas, aphids, *Peronospora* and red spider, combated by spraying four times. From August 20th to September 30th, the entire crop was gathered, producing a better quality than in 1929.

Canada.

In September 1930, the Canadian import duty was doubled, so that now English hops are liable to pay 8 cents, hops from the most-favoured nations 12 cents, and from any other country, U.S.A. included, 14 cents per lb. This protective measure is expected to bring about an increase of British Columbia's acreage.

The unfavourable influence exerted by contracts on the formation of prices is no longer contested. Anticipated sales of 1931 hops, though in a smaller degree, have been compiled in the following table (prices per 50 kilos):

Contracts.

Saaz:	April, May 350/400 Kc.
Auscha:	March 250/300 Kc at the producers' 350/400 Kc at the traders'
Belgium:	May, Poperinghe, delivery October/November 355/365 frs.
Poland:	April 6.50—7 \$.
Slovenia:	April 400/500 Dinar
Backa:	May 350/400 Dinar
U. S. A.:	Washington: March 14—14½ c per lb. for 1 year
	Oregon: March 15—16 c per lb. for 1 year
	Washington: May 15½—16 c per lb. for 3 years.

**World's Hop Consumption.**

In our annual reports we used to estimate the presumable hop-consumption during the year to come. As it is impossible to foresee the consequences of the prevailing crisis with regard to beer-consumption, we limit ourselves to calculating hop-consumption on the basis of figures known.

**World's Hop Consumption 1930/31.**

	Beer-Production 1930 hectolitres	Dose of hops per hectolitres in pounds of 1/2 kilo	Hop Consumption in 1000 cwts. of 50 kilos each
Germany . . . . .	48.486.000	0,46	223,03
Austria and Hungary . . . . .	5.529.000	0,52	28,75
Czechoslovakia . . . . .	11.410.000	0,60	68,46
Poland and Danzig . . . . .	2.472.000	0,60	14,83
Roumania, Jugoslavia . . . . .	1.232.000	0,60	7,39
Baltic States . . . . .	697.000	0,55	3,83
Balkan . . . . .	187.000	0,50	0,93
France . . . . .	18.314.000	0,40	73,25
Belgium and Luxemburg . . . . .	15.630.000	0,45	70,33
Netherlands . . . . .	2.316.000	0,43	9,95
Norway . . . . .	525.000	0,43	2,25
Denmark, Sweden . . . . .	5.273.000	0,33	17,40
Switzerland . . . . .	2.610.000	0,40	10,44
Spain, Portugal, Italy . . . . .	1.706.000	0,50	8,53
Russia . . . . .	3.000.000	0,50	15
<b>Continent</b>	<b>119.387.000</b>		<b>554,37</b>
Great Britain . . . . .	30.770.000	1,05	323,08
Irish Free State . . . . .	3.663.000	1,50	54,94
<b>Europe</b>	<b>153.820.000</b>		<b>932,39</b>
United States of North America . . . . .	28.000.000	—	225
Canada . . . . .	2.793.000	0,75	20,94
Central America . . . . .	1.082.000	0,55	5,95
South America . . . . .	5.230.000	0,60	31,38
Eastern Asia . . . . .	1.769.000	0,50	8,84
India . . . . .	118.000	0,90	1,06
Australia and New Zealand . . . . .	3.930.000	0,90	35,37
Africa . . . . .	552.000	0,70	3,86
<b>World's consumption</b>	<b>197.294.000</b>		<b>1,264,79</b>

**Growth of the New Crop.**

The belated winter which lasted till late into April, impeded work in the hop gardens, causing the plants to lag about a fortnight behind normal development at the end of the said month. Damp and hot weather in May enabled the plants quickly to make up for their backwardness. As in all years, reports are coming in that notify the appearance of fleas, lice, and the Peronospora, less combated than in former years. Up to now the crop may be said to promise well.

**Joh. Barth & Sohn.**