

Home Office: Nuremberg, Bavaria Branch Houses at Saaz, Strasbourg and New York Hop Farm "Barthhof" in Hallertau (Bavaria)

NUREMBERG, BAVARIA

July 20th 1934

Hop Report for 1933/34.

The tendency to consolidate the home markets and to improve their mutual relations was continued in 1933/34 by most of the countries. The world trade declined since 1929 from 287,000 Million Reichsmark to 101,600 Million in 1932 and to 91,800 Million in 1933.

Together with many other countries Germany suffers under the retrograde movement of her exports; on her home market improvements have taken place, due to the various measures of the German Government and in consequence of the reduction of the number of unemployed from February 1933 with 6,047 Million to 2,525 Million in May 1934.

The Beer production of the various countries during the calender or fiscal year 1933 or 1932 is to be seen from the figures

Beer production

Production of Beer.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	American Barrels		American Barreis	American Barrels
United States of Amer.	33,346,933	*Mexico	443,092	*Danzig 54,534
		Luxembourg	355,326	*Livonia 52,830
		*New Zealand	341,692	*Bulgaria 51,126
		*Italy	339,988	*Estland 51,126
Belgium	12,270,240	*Norway	339,136	Portugal 47,718
*Czechoslovakia	6,786,124	Chili	332,319	*Greece 46,013
Russia 1932	3,152,770	*Roumania	305,052	*Ecuador 45,161
*Irish Free State	2,506,026	*Finland	248,813	*Bolivia 39,197
*Austria	2,148,996	*British South Africa.	230,067	*Egypt 38,344
*Switzerland	2,061,230	*Jugoslavia	183,201	Philippine Islands . 34,084
*Sweden	2,060,378	*Columbia	170,420	San Salvador 20,450
*Australia1932	1,930,006	*Cuba	147,413	*Turkey 19,598
*Denmark	1,723,798	*Hungary	140,596	Honduras 14,486
*Canada1932	1,661,595	*Algeria	96,287	Costa Rica 11,929
*Japan	1,624,103	*Uruguay	87,766	*Congo 1932 11,077
*Netherlands	1,371,029	*China	83,506	Paraguay 8,521
*Argentine	1,114,547	*India1932	69,020	Guatemala 7,669
Poland	886,184	*Panama	63,907	Nicaragua 4,260
Brazil		*Venezuela	60,499	Haiti 2,556
Saar-Territory	632,258	*Lithuania	59,647	Jamaica 2,556
Spain	538,527	*Peru	58,795	*official figures.

IMPORTANT NOTE: All BARRELS mentioned in this report are to be understood in AMERICAN BARRELS.

- 1 American barrel = 117,35 liter; 1 English barrel = 163,57 liter or 1,383 American barrels.
- 1 cwt. = 112 lbs., 1 Zentner = 110,2 lbs., 1 ctw. = 1,016 Zentner, 1 lb. = 0,453 kg.
- 1 acre = 0.404 hectar, 1 hectar = 2.471 acres; 1 inch. = 2.54 mm.

New York Exchange on July 20th, 1934:

- 1 \$ = French Francs (ffrs.) 15,24 Reichsmark (RM.) 2,513 £ = U. S. Dollar (\$) 5,03= U. S. Dollar (\$) 0,39 1 \$ =Czechosl. Crown. (Kc.) 24,— 1 \$ = Jugosl. Dinars (Din.) 44,— 1 \$ = Belgian Francs (bfrs.) 21,45
- = Pound Sterling(£) 1 \$ = Polish Zloties (Zl.) 5,29

Beer production.

In 1933 only a certain number of countries had to suffer the utmost pressure of the economical crisis, consequently showing a retrograde beer consumption in comparison to 1932. The following countries report a decline of heer consumption in per cent.: Sweden (after raising the malt tax) 14%, Norway about 6%, Austria 17,5%, Hungaria 10%, Free State Danzig 16%, Czechoslovakia 17%, Greece 18%, Poland 26%, Turkey 28%, Bulgaria 34%, Jugoslavia (after abolishing all taxes for alcoholic drinks, except for beer) 33%, Luxembourg about 5,5%, Belgium 7%, Spain 12%, Netherlands (after raising the beer tax) 10% in exports and 11% on the home market, New Zealand 10% and Uruguay 14%.

Other countries, on the contrary, could increase their beer consumption against 1932: Colombia by 40%, Japan by 38%, Mexico by 25%, Argentine by about 12%, Egypt by 15%, England by 9%, Cuba by 7% and Ireland by 6%. Others show small differences upward and downward.

United States: On December 6th, 1933, Repeal of Prohibition was ratified. The beer consumption

for 1933/34, estimated beforehand with 35-40,000,000 barrels, has not been reached. The beer sales from April 7th, 1933 till March 30th, 1934 amounted to only 26,963,000 barrels. This consumption, smaller than expected, may find its explanation in various reasons: The economical crisis, prevailing throughout the country; the unusual long and strong winter 1933/34; the still insufficient quality of the average brew and the fact that the American youth of to-day is still unaccustomed to beer. Besides quite a large number of breweries was not able to bring up the necessary funds to run their business.

The number of permits rose from 194 to 699 within the past year (May 1933-April 1934). Only two States have remained dry: Kansas and Alabama. 16 States allow only beer of 3,2% alcohol,

in the other States beer with 4-6% alcohol is being sold.

In Germany with about 4,500 working breweries, the beer production could be increased by nearly 1½% or from 28,616,105 barrels in 1932 to 29,084,877 barrels in 1933. The expected reduction of the beer tax which would mean cheaper beer, more adapted to the purchasing power of the people, had not been realised.

England, however, after a strong reduction of the beer tax, followed by cheaper prices, was able to increase her consumption for the first three months of 1934 by 37%, thus animating the agriculture and the trade.

The world's beer production in 1933 is estimated with about 145,419,527 American barrels against 133,538,913 American barrels in 1932.

Growth of the 1933 Hop Plants in Germany.

A favourable early Spring enabled the uncovering of the plants already in March 1933. The roots in general had wintered well and showed sound appearance. Due to a considerable increase of the acreage from 19,797 acres in 1932 to 26,113 acres a strong demand set in for seedlings.

In the Hallertau district the heavy sites of Au, Wolnzach and Mainburg were favoured. The northern districts of Pfeffenhausen, Siegenburg and Geisenfeld resulted much better than the year

before, since the lighter soils stood easier

pitation than in 1932, in June only 6 "dry" days). In the Hallertau district some producers sprayed up to 21 times against downey mildew. The gardens in general have been well cultivated although it was evident that during the last 3 years of low prices a more economical manuring had taken place. Before picking the gardens were in good shape with the exception of but few ones, although generally the side-shoots up to 6 feet from below were bare of cones. Since the growth was not so rich as in 1932, the sunny and favourable weather before picking helped much to bring forward the development of the plants and the ripening of the cones, resulting a considerable larger crop than estimated beforehand.

In the Spalt district the plants suffered from downey mildew till beginning of July. In best conditions were the gardens of the township of Spalt whilst those of the other Spalt sites presented frequently poor gardens with small cones.

In the Hersbruck Hills and the Aisch district downey mildew, lice and red spider caused considerable damages, but the yield was equal to that one of 1932.

In the Tettnang district the growth was impaired by downey mildew, lighter soils suffered from lice. When picking began, the gardens had recovered well and showed good aspect, giving an ex-

cellent crop.

In Baden and Wurttemberg, owing to favourable weather in July and August, the gardens were able to make up the damages suffered and were in best conditions before picking. Picking generally began from August 25th to 28th, 1933 and was done under dry and sunny weather that ripened the crop almost too quickly. It contributed to an excellent result in all German districts. When spraying was already over, heavy night dew produced in some districts downey mildew and discolouring of cones.

bome districts	downey mildew and	anoundaring
first-rate:	middle:	inferior:
%	<u>%</u>	%
15	75	10
10	60	25
.10	40	50
50	40	10
20	50	30
an Hop Import	ts: German Ho	p Exports:
451,509 lbs.	6,437,22	23 lbs.
	7,010,92	4 ,,
245,831 ,,	5,978,13	30 ,,
	first-rate: % 15 10 10 50 20 an Hop Import 451,509 lbs.	% % % % 75 10 60 10 40 50 40 20 50 an Hop Imports: German Ho 451,509 lbs. 6,437,22 127,386 , 7,010,92

Hop Acreage and Production.

Producing countries	Acreage in acres			Yield per acre in pounds			Our estimate of the yields in 1000 pounds					
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
Hallertau	16,779	13,252	10,428	15,019	1,000	849	796	1,265	16,761	11,251	8,309	13,246
Spalt	4,055	3,434	2,908	3,143	611	375	549	400	2,480	1,289	1,598	1,168
Hersbruck	4,292	2,938	2,110	3,069	274	97	365	441	1,179	287	771	937
Aischground	817	499	301	452	418	154	182	107	342	77	55	33
Jura	289	227	153	205	342	194	287	356	99	44	44	55
Bodensee	64	49	42	42	515	449	262	785	33	22	11	33
Rheinpfalz and other												
districts	1,163	882	652	388	511	375	371	736	595	331	242	286
Bayaria	27,459	21,281	16,594	22,318	782	625	664	887	21,489	13,301	11,030	15,758
Wurttemberg	3,667	3,177	2,547	3,064	607	454	640	837	2,226	1,444	1,631	2,094
Baden	1,079	818	622	694	970	295	532	723	1,047	242	331	452
Prussia etc	96	46	34	37	687	480	647	955	66	22	22	22
Germany	32,301	25,322	19,797	26,113	769	592	657	923	24,828	15,009	13,014	18,326
Saaz	29,039	22,533	18,149	19,308	838	902	686	499	24,464	20,387	12,397	9,069
Auscha	4,208	3,420	3,044	3,044	1,044	1,089	846	846	4,397	3,725	2,579	2,612
Raudnitz	3,079	2,387	1,863	2,172	834	881	615	802	2,568	2,105	1,146	1,499
Dauba	602	516	3 08	254	1,098	726	896	820	661	375	276	220
Moravia etc	1,243	1,028	546	684	683	557	606	606	849	573	331	331
Czechoslovakia	38,171	29,884	23,910	25,462	860	905	695	571	32,939	27,165	16,729	13,731
Alsace	5,011	4,541	3,410	3,323	659	121	387	753	3,306	551	1,322	2,479
Burgundy and Lorraine .	2,407	1,415	771	813	274	350	415	672	661	496	320	540
Northern France	820	479	395	447	336	576	1,423	1,614	276	276	562	639
France	8,238	6,435	4,576	4,583	515	205	481	793	4,243	1,323	2,204	3,658
Poland	7,413	6,177	5,387	6,177	557	642	654	673	4,133	3,967	3,526	3,637
Wojwodina	2,965	2,471	1,482	2,100	483	490	817	606	1,433	1,212	1,212	904
Slovenia	3,459	2,718	2,965	2,842	878	892	687	918	3,042	2,424	1,873	2,623
Jugoslavia	6,424	5,189	4,447	4,942	695	700	688	789	4,475	3,636	3,085	3,527
Russia	4,942	4,942	2,965	2,471	557	557	557	579	2,755	2,755	1,653	1,433
Belgium	1,890	1,729	1,210	1,408	932	674	956	1,458	1,763	1,157	827	1,818
Various countries	1.235	988	370	370	446	446	600	600	551	441	220	220
Continent	100,614	80,666	62,662	71,526	749	687	655	736	75,687	55,453	41,258	46,350
England	19,997	19,528	16,531	16,894	1,417	969	1,273	1,462	28,336		21,056	24,244
Europe	120,611	100,194	79,193	88,420	874	758	784	887	104,023	74,381	62,314	70,594
United States of America		21,400	22,000	26,500	1,202	1,354	1,127	l	23,447	26,410	, ,	38,019
Canada	948	925	990		1,230			1,494	1,166	1,230	791	1,477
Australia and								,		•		•
New Zealand	1,802	1,070	1,643	1,643	1,223	2,060	2,162	1,605	2,204	2,204	2,314	2,645
World's production	142,861	123,589	103,826	117,553	941	856	891	1,083	130,840	104,225	89,539	112,735

Since Repeal in the United States, the prices for the 1932 crop of German hops had a sharp rising tendency within the months from March to August 1933, or from RM. 190 to RM. 290 and for Saaz hops from Kc. 950 to 2250; before the new crop came in, they fell again to RM. 220 and Kc. 2000 respectively per cwt. These comparatively high prices created the opinion that also those for 1933 hops would reach about the same level, remembering that the Central European acreage since 1929 with about 142,500 acres had been reduced to 63,000 acres or by about 55% in 1932.

The producers of all hop cultivating countries had passed hard times. In consequence of insufficient prices they had built up strong organisations and were decided to exercise a stronger influence upon the formation of prices than hitherto. The first quotations for 1933 hops were formed in the Saaz district under the impression of its unfavourable result (approximately 8,300,000 lbs. against 12,340,000 lbs. of the year before) and rose within a few days from Kc. 2000 to Kc. 2600. In the Auscha district prices began with Kc. 1800 and rose quickly up to Kc. 2250. These high prices in Czechoslovakia could not be kept up and fell by middle of October to Kc. 1500—2000 in Saaz and to Kc. 1200 to 1500 in Auscha.

The first prices for hops in Germany were quoted as usually in the Tettnang district. They started in the last days of August 1933 with RM. 260 to 280 and rose, in consequence of the producers' reserve to sell, to RM. 300. Besides, these hops were in most cases insufficiently dried, thus causing to the trade considerable loss of weight during the final drying process. The yield of the Hallertau district was estimated by end of August with 9,900,000 to 11,000,000 lbs. against 8,265,000 lbs. of the year before. Prices for Hallertau hops began with RM. 270 to 300. The producers were promised by their

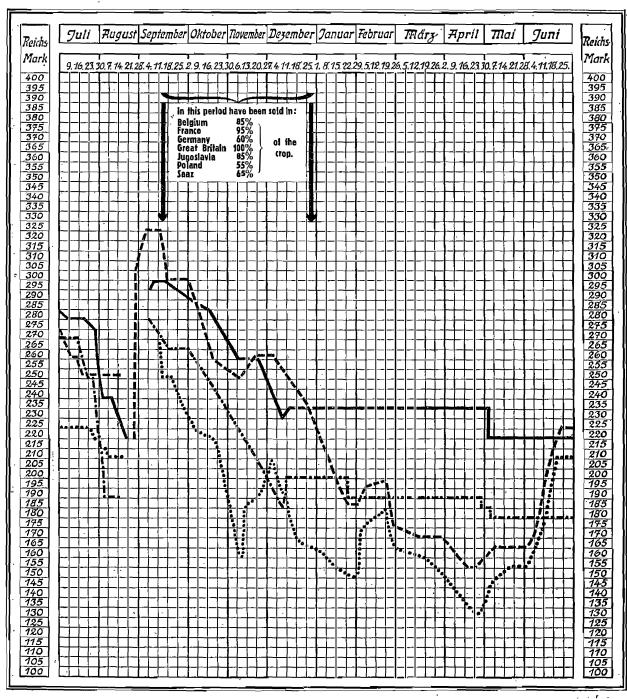
Prices (to growers).

Prices (continued). organisation a full success, if they decided to refuse cheaper offers or to sell but in small quantities. By this method many a favourable opportunity was missed. In the Spalt district at the beginning prices ranged between RM. 300 to 330 and even more, keeping away the buyers. The high prices caused considerably smaller purchases by the international brewing industry than expected. On October 1st, 1933 the German breweries stated their stocks with 93,8% of one year's consumption.

The following table shows the movement of prices for Saaz and Hallertau hops with Seal and Certificate for the remainders of the 1932 crop in July and August last year and of the crop 1933.

These growers' prices are to be understood per cwt. of best available and middling quality.

Movement of Prices 1933/34.



Hallertau choice quality - - Saaz choice quality per cwt. fair average quality, fair average quality RM. 100 = approx. \$ 38.-- (July 1934).

In order to defend the high level of prices, the selling organisation of the German hop growers, called "German Hop Traffic Company" (G. H. T. Co.), from beginning of September till end of November, was induced to quote in the market Hallertau hops from RM. 295 to 265, Tettnang hops from RM. 325 to 300 and Hersbruck hops from RM. 250 to 235, prices to dealers.

In spite of all means applicated the lack of demand until middle of October forced prices down from RM. 220 to 250 for Hallertau hops, from RM. 260 to 280 for Spalt hops and from RM. 220 to 280 for Wurttemberg hops.

On October 24th, 1933, the Board of the German Hop Industry had to interfer because of the unsatisfying conditions of the hop market and fixed "low-limit" prices for the various German growths from RM. 180 to 280, providing for each three qualities. The still lacking deman

stand that the offers from the growers, every day more insisting, had to be restricted in order to protect the official limits. Although the top prices could be obtained for the first qualities, the larger part of the hops, impaired in colour and quality in consequence of unsuitable storage at the producers, resulted almost unmarketable.

By Official Decree of December 6th, 1933 the German Hop Traffic Company was intrusted with the monopolised purchase of all 1933 German hops, left unsold at the farmers. The G. H. T. Co. had to offer these hops to the dealers according to growth and quality at prices from RM. 180 to 280. For the export trade a reduction of RM. 40 was granted in order to enable it to compete with foreign hops which were considerably cheaper at that time. About 7,275,000 lbs. were standardised, cured and stored by the G. H. T. Co. from the beginning of December to middle of February. The producers were paid a first rate of RM. 50 per cwt. on delivery and a second one of the same amount in May 1934. Although during the first three months of this year the demand from abroad, especially from U. S. A., reduced considerably these stocks, it showed as well that larger quantities of the 1933 crop than expected remained unsold, owing to a slow home market. The Board of Agriculture was assisted by the German Brewers' Association to create means and ways to dispose of a large part of the remaining stocks to help poor growers. The German brewers following this appeal, have taken over the quantities expected, to live up to the principle of general welfare now ruling in Germany.

The analysis of 1933 hops as to their amount of bitter principle, made by the Governmental Station of Brew-Technical Experiments at Weihenstephan and by the Station of Scientific Research in Munich, have issued the following figures, to which we add those of 1929/32:

Bitter Principle Analysis of 1933 Hops.

Sales Regulations

in Germany.

	1929	1930	1931	1932	1933
Origin	Bitter principle	Bitter principle	Bitter principle	Bitter principle	Bittér principle
	without water				
•	%	%	%	%	%
Hallertau	13,5—17,0	15,0—19,1	14,2—19,7	15,9—18,9	14,2—16,9
Spalt	13,5—17,5	15,9—19,5	15,6—19,6	15,3—19,5	13,0—16,1
Aischground	13,5	. 15,0	15,0	15,016,3	
Hersbrucker Gebirge	15,1—16,8	14,1—17,7	15,316,4	15,3—18,2	11,5—16,8
Wurttemberg	14,4—17,9	15,2—18,3	15,9—18,7	15,4—20,5	13,4—17,7
Baden	13,7—15,6	14,3—20,2	14,5—18,2	,,	15,6—16,2
Auscha	12,5—15,8	14,7—15,8	12,5—15,8	13,1—16,7	13,7—15,8
Saaz	12,9—14,6	14,4—15,8	13,7-16,7	14,2—16,8	12,7—14,1
Alsace-Lorraine	`15,3	15,3	_	16,5	12,9
Styria	13,9—15,4	15,6—16,7	12,4—13,5	13,5—15,3	12,1—13,2
Backa	14,8—14,9	14,9	12,6—14,0	14,5—16,7	15,7—16,4
Poland	15,7—15,8	15,7—16,4	13,0—14,5	13,2—15,5	12,4—13,7

The

A retrospective view of the Central-European crop 1933 allows the following statements:

1) Due to the dry and hot growing season and picking time the cones of the Hallertau, Spalt, Tettnang, Auscha, Styria, Backa and English hops inclined far more to break than in normal years during the final drying and curing process.

2) Too early picking had disfavoured a large part of the Saaz crop.

3) The Polish and Russian hops show every year increasing signs of downey mildew in consequence of not combating this disease.

The stocks of 1933 hops on open markets of Central Europe without Germany are small. By end of June they amounted to about 220,400 lbs. in Czechoslovakia, to max. 110,200 lbs. in Jugoslavia and to about 110,200 lbs. in Poland, including the remainders of all hop growing countries, resulting altogether about 440,800 lbs.; to this figures have to be added the German stocks in hands of the G. H. T. Co. with about 1,680,000 lbs.

The valuable enquiry of the Official Board of Alimentation on April 10th, 1934 produced the following interesting figures: Germany with approx. 4,500 working breweries and a total output of 29,084,877 American barrels requires every year about 18,000,000 lbs. of hops.

The breweries with retrograde output in 1933 have certainly enough stocks, whereas the breweries in some European countries and of the New World were able to diminish their stocks and will need increased quantities in consequence of a rising output; among them will be the United States of America with a rising consumption by opening new breweries and improving the quality of beer.

The breweries' stocks all over the world are as important to the formation of prices as the crop itself. It is wrong to believe that the result of the crop alone can fix prices. Many mistakes have been made in this direction after the 1933 crop. The world's prices for hops result from various points: the yield, the stocks of former crops, the usual requirements and finally the change in demand as consequence of the tendency of beer consumption.

General Experience about 1933 Hops.

Stocks in Germany and on Foreign Markets.

Influence of the Stocks upon Formation of Prices.

Regulation of the Acreage in Germany. In order to regulate the hop acreage, new decrees were published in Germany: Growers have to state their acreage every year in the time between June 16th and 30th. New hop gardens require a special permit to be laid out.

In 1933, new plantations were admitted in Germany to the following amount: Wurttemberg 383 acres, Baden 173 acres, Prussia 27 acres, Thuringia $2\frac{1}{2}$ acres, Hallertau $370\frac{1}{2}$ acres, Spalt 247 acres, Hersbruck 494 acres, Jura 43 acres, Rheinpfalz 15 acres, Aisch district 111 acres, or in total 1,866 acres with 4,000,000 hop plants. Since about 5,450 acres had been already laid out, 4,400 acres had to be rooted again, including the non-declared ones!

Agreements between Hop Growing Countries. Middle of May, the Central European Hop Marketing Board in Saaz declared the restriction of the acreage to be a necessity. The delegates of Poland and Slovenia intend to convince their Governments to issue certain decrees to restrict the acreage of these countries to that one in 1934. France and Belgium consider similar steps. Furthermore it is intended to recommend to all countries without laws of Provenience to establish such laws for the protection of the origin of hop and finally to prohibit the export of seedlings.

New Hop Cultivating Countries.

The tendency to economic independence has induced a number of states to encourage the agriculture to hop growing in their own contries. We mention Italy with hop gardens in Pegaro, Perugia, the experiments by the Carlsberg Laboratory in Copenhague, Denmark, the experimental hop farming in Schonen, Sweden, where in 1933 7,714 lbs. have been harvested, then Japan, yielding a yearly crop of 55,100—66,120 lbs. from 125 acres in Hokkaido, Nagano and Niroshima. In Manchuria two important Japanese companies intend to grow hops in a large scale. Also in South America small hop gardens have been laid out, such as in Mendoza, Argentine, in Santiago, Chile, and in Caxias, South-Brazil.

Czechoslovakia.

Saz. After a mild winter the plants could be uncovered early but they advanced only slowly due to cool weather in May and June 1933. The appearance of fleas was harmless and lice were less strong than usual. Extraordinary dryness prevailed throughout July and August (precipitation April—July 139,5 mm).

Picking began on August 18th, too early so that in many cases hops in unripe condition were harvested. Picking was already finished 8—10 days later. The premature start of harvesting is attributed to the insufficient knowledge of downey mildew. The producers caused themselves considerable loss which can be estimated up to 20% of the total 1933 crop; they were afraid, a rain which fell just before picking, would discolour the cones.

Auscha-Raudnitz-Dauha. The hop gardens of the Auscha district, owing to more rain, were in better condition than those of Saaz. Picking lasted from August 25th till September 20th, 1933,

The product, on the average, was a good one, of good green colour, although the cones were smaller than usual. The Polep district, the gardens of Geltschseite and some of the mountainous sites were favoured. Particularly well treated gardens produced as much as 3300 lbs. per acre. In the Raudnitz district almost exclusively early-hops are cultivated, the picking of which began on August 20th. The sites of Launken and Chodaun were considered as favoured.

The Quality of the 1933 Crop was judged as follows:	prime	middle	inferior
	- %	%	%
Saaz district	10	ŹŎ	$2\overset{\circ}{0}$
Auscha & Raudnitz district	25	60	15
Dauba district	20	60	20

In Saaz prices set in with Kc. 1800 under the impression of the small yield and rose quickly to Kc. 2600, in spite of very small transactions on account of the farmers' unwillingness to sell. The high level could not be kept up, since the lack of continuous demand evidently had to produce falling tendency.

On February 17th, 1934, the Czechoslovakian currency was reduced by $16^2/_3\%$ of its value. Short time before, prices ranged between Kc. 1550—1650, by end of February, when 1,568,000 lbs. were still unsold, between Kc. 1600—1750. Middle of June 1934 prices suddenly rose to Kc. 2200 owing to unfavourable crop prospects in consequence of drought. (Stocks approx. 250,000 lbs.)

During picking time, the prices for Auscha and Raudnitz hops rose within a few days, under the impression of the bad crop in the Saaz district, from Kc. 1600 to 2300, to fall again later, although slowly but steadily. By end of January 1934, prices had finally gone back to Kc. 1000—1250. In February rising demand set in at small stocks and prices went up again to Kc. 1600, to fall afterwards to Kc. 1300 by end of May. The unfavourable prospects for the coming crop caused a strong tendency in June 1934, consequently prices rose to Kc. 1800 and more for the small stocks left (about 44,800 lbs.) which were refused for offer.

In Dauba

tions. Prices set in with Kc. 1750 and came down to Kc. 1000 later on.

Beginning of September 1933, stocks in brewers' hands were estimated at about 2,400,000 lbs. in comparison to a consumption of nearly 5,600,000 lbs. per year. Also in Czechoslovakia a mi staken policy as to the beer tax (which reaches $^2/_3$ of the selling price) has contributed to a strong reduction of beer consumption.

Regulation of the acreage in Czechoslovakia.

Valid from July 14th, 1934, a new law has decreed the marking of the hops also for the home market, applicated so far only for export. Each grower has to state immediately his acreage of 1928 and 1929 and in future until end of April the acreage under cultivation. The Government reserves the right of fixing the acreage in case of necessity, which will be done after hearing all parties interested. Hop gardens of less than half an acre are excluded from this regulation. The laying out of new gardens requires a special permit except for those to replace old ones. Until August 1st, the hop stocks have to be reported. Contracts on futures have no validity. On March 28th, 1934, the erection of new hop gardens for 1934 was forbidden by emergency decree, special cases excepted. Gardens laid out after the 1933 crop in replacement of old ones are allowed to be continued. It is intended to form a Hop Marketing Board in order to regulate the hop market.

We welcome a strict control of the acreage, because statistical figures will gain by exactness and facilitate better judgement of the markets. The law against contracts on futures ought to have been decreed since long, considering the repeated efforts of the organisation of the hop farmers in Czechoslovakia with the experience that speculative contracts wrongly influence the first development of prices, not to speak of the differences often arising on delivery between producers, dealers and consumers.

The intended formation of a semi-official sales-monopoly, including purchase and sale of hops, will perhaps be able to overcome the many difficulties existing within the own national borders. To extend it for exportation of hops appears to us the safest way to restrict the given possibilities on which, after the heavy decline of the home consumption, the Czechoslovakian hop industry has to rely upon. We state that about 80% of the 1932 crop were exported. A sales-monopoly with its complicated construction will never be able to substitute the individual and busy action of the exporter as to acquisition and conservation of international commercial relations.

The small stocks of Czechoslovakian crops 1931 and 1932 were entirely sold in June 1934, those of 1933 crop amounted to about 220,000 lbs. of Saaz hops, 33,000 lbs. of Auscha and 16,000 lbs. of Raudnitz hops, by end of June, 1934. Czechoslovakian Exports: chaelavakian Imparta

	Czecnosiovakian imporis:	Czechoslovakian Exp
Sept. 1st, 1931—Aug. 31s	st, 1932 — lbs.	20,712,972 lbs.
Sept. 1st, 1932—Aug. 31s	t, 1933 — lbs.	13,595,154 lbs.
Sept. 1st, 1933—Mai 31s	t, 1934 — lbs.	9,122,356 lbs.

Out of 6,720,000 lbs. of the 1930 Czechoslovakian crop, bought at prices from Kc. 250-400 a few years ago to free the markets, 1,000,000 lbs. were destroyed by fire, another 2,240,000 lbs. by water in the course of the last months, whereas only 450,000 lbs. could be sold. Another 3,000,000 lbs. remain unsold at present.

Lasting rainfall in May and June 1933 kept back the growth of the French hops.

Prices began with ffrs. 1400—1500 and came down to ffrs. 1200 in October 1933 and to ffrs. 1000 in November/December, resulting thus an average price of firs. 1250 per cwt.

The Quality of the Alsacian hops was estimated as follows:

50% prime 40% middle 10% inferior
About 90% of the crops of Alsacc, Lorraine and Burgundy were already sold at the beginning of October 1933.

Instead of the contingent of 1,792,000 lbs. at reduced duty tariff of ffrs. 200 per 100 kilos, only 448,000 lbs. were granted to Czechoslovakia until December 31st, 1933. Since this time contingents have been nullified and all hops imported are paying the same tariff or ffrs. 400 per 100 kilos. The wishes of the farmers to raise the duty tariff to as much as ffrs. 600 have been rejected. Czechoslovakia, instead of the contingent for hops, has obtained certain advantages for its exports of barley to France. Besides, there are rumours that Czechoslovakia shall be given the preference with 65% of the total imports of hops.

The organisation of the French hop farmers intends not to extend the acreage over 6,250 acres (1933: 4,625 acres). The increase in 1934 amounts to about 368 acres in Alsace and 74 acres in Northern

Up till now, instead of barley and hops, surrogates could be used in France up to 50%; a new legislative proposal intends to cut them down to 20%.

Exports from France:
357,504 lbs.
85,792 lbs.
634,386 lbs.

Cold and rainy weather from May till July 1933, assisted by lice, downey mildew and aphis fly, hampered the development of the plants in Poland. About 56,000lbs. of the crop were left unpicked on account of poor quality and discolouring. Quality, colour and formation of cones in Volhynia and Congress Poland were less satisfying than the year before, the defective appearance decreased their demand. The largest part of the crop consisted of hops of inferior quality being mostly exported to England at prices of about Zloty (Zl.) 250 per cwt. (\$ 27). In Galicia, the colour was worse than the year before, but the quality was a better one.

In the Neutomischel district (Great Poland), downey mildew and red spider caused a very bad crop of about 22,400 lbs. Polish hops should be better dried in future in order to preserve their colour. France.

Poland.

Poland (continued).

Prices began with Zl. 300—500 in September 1933, followed by an almost complete standstill in transactions at prices of Zl. 260—325. By end of March, they came down to Zl. 160—260, in April to Zl. 165—230 and finally to Zl. 140—300 in May 1934.

Quality of	of the 1933 was judged as follows:	first-rate	middling	inferior
	· -	%	%	%
	Volhynia and Great Poland	10	70	20
•	Congress Poland	20	40	40
	Galicia	40	50	10

About 250 acres of old gardens had to be rooted because 50—60% of the plants were perished. Gardens that have not been under cultivation since years, were set out again in 1934, so that the total acreage of to-day will amount to 1,250 acres in Congress Poland, 3,700 acres in Volhynia, 620 acres in Little Poland, 250 acres in Great Poland, or altogether 5,820 acres.

About 50% of the 1934 plants died on account of the exceeding dryness.

By end of May remaining stocks were estimated as follows: 1928 and 1929 hops 448,000 lbs., 1930 hops 22,400 lbs., 1931 hops 168,000 lbs. and 1932 hops 56,000 lbs. Another 336,000 lbs. of crops 1928 to 1932 are still in hands of a certain farmer who understands perfectly well to grow hops—but not to sell them. The stocks of 1933 hops amount to about 33,600 lbs.

. Imports to Polan	ıd:	Exports from	m Poland:
1st Sept. 1931—31st Aug. 1932	102,816 lbs.	3,367,840 lbs.	
1st Sept. 1932—31st Aug. 1933	224 lbs.	3,954,496 lbs. (incl.	560,000 lbs. old-hops)
1st Sept. 1933—30th Apr. 1934		2,661,344 lbs. (incl.	84,000 lbs. old hops)

Jugoslavia.

Slovenia: Till June 20th 1933, the plants suffered from cold and wet weather. Picking began on August 23rd and a crop was harvested unequal in colour and cones, but finer and heavier than last year. It must be stated that in 1933 a greater attention was paid to the gardens in expectation of higher prices. The pickers were paid Dinars 1.40 per measure of 8 gallons and full board. (1 acre = about 1,680 plants). To normalise the purchase, "standard" order formules were issued and general regulations for the buying put into effect. These measures can be recommended to all hop growing countries in order to stop abuses.

Right after picking, prices for 1933 contracts rose to Dinars 3500—5000 per 100 kilos (\$ 39 to 57 per cwt.) or they were nullified, since the hop farmers cannot be forced to meet such contracts whereas the purchaser has to take over the hops on the farmer's demand. Prices began with Dinars 5000 per 100 kilos in Slovenia (about \$ 57 per cwt.) and went up by leaps and bounds to as much as Dinars 9500 (\$ 105 per cwt.), reaching a dead point. Middle of September purchases set in again with Dinars 6500 to 7000 (\$ 72—77 per cwt.), mostly for English account. In April prices came down to Dinars 4000 (\$ 44 per cwt.). The good result of the 1933 crop, 85% of which were sold at prices of about Dinars 7000 (\$ 77 per cwt.), made increase the acreage already in autumn 1933 by 15% and in spring 1934 by further 15%, thus showing Slovenia a total increase of 30% or about little more than 4000 acres in 1934 against 3000 acres in 1933.

Backa: Never before the Backa plants have suffered so much from downey mildew as in 1933. Picking began on August 25th and lasted only 8 days. Backa hops were in colour somewhat better than 1932, although lightly speckled and weak in quality. When the great rise of prices in Slovenia began, the Backa hops were not yet ready for sale. Larger quantities were purchased at prices from Dinars 8000 to 8500 (\$ 88 to 93 per cwt.). From October to December prices came down to Dinars 5000, when still 280,000 lbs. were unsold, and in April Dinars 3500 to 4000 (\$ 39 to 44 per cwt.) were paid per 100 kilos. The acreage is said to have been increased by 60—70% from 2250 acres in 1933 to 3705 acres in 1934, but as long as the producers will not learn to combat properly downey mildew, failures have to be expected.

Quality of the 1933	crop was judged as follows:	first-rate	middling	inferior
	Slovenia	% 55	% 40	%
•	Backa		30	20

Overtaxing of beer in favour of wine and liquor has caused a further reduction of beer consumption since 1932, so that the Jugoslavian breweries are working with only 20% of their capacity. The reduction amounts to 80% since 1927 or decreased from 630,000 barrels to round 183,000 barrels. Consequently the growers when at present enlarging their acreage, should be aware of the fact that the narrow home market cannot take up sufficient quantities in years of large international crops and small exports. We remember the fact that Jugoslavia was already once compelled to reduce its acreage from 32,000 acres in 1927 to 4,000 acres in 1932.

Russia.

It is reported from Russia that the introduction of the collective system for the hop culture proved extremely disadvantageous. The production of hops in Volhynia up to 1932 was reduced so far that the crop, considering the usual exports, was not enough for the home breweries. Order was given to collect the wild grown hops which in 1932/33 were offered to the breweries in small quantities at prices as high as 5 Rubel per kilo (or about \$ 216 per cwt.!), an exceedingly high price for a quality

of no use for brewing purpose. In 1932 the brewing industry had to pay the following prices for Volby no use for strong parties for Vollynia hops: first class quality about \$ 95, second class quality about \$ 77 and third class about \$ 52, adding to these prices the amount of general expenses or \$ 18 per cwt. The breweries were delivered with 30% of first and 70% of second and third class quality.

In Belgium growers sprayed up to 10 times against downey mildew, lice and red spider. The great dryness injured the development of the Buvrinne type of hops which without the help of male plants do not properly close their cones.

Prices began with bfrs. 1000 and came down to bfrs. 600 in the course of the season to rise again to bfrs. 800-850 towards the end of June 1934 owing to the unfavourable crop prospects because of

the drought.

	Belgian Imports:	Belgian Exports:
1931:	8,840,832 lbs.	270,144 lbs.
1932:	5,032,832 lbs.	387,744 lbs.
1933:	4,014,752 lbs.	957,600 lbs.

In Summer 1933, aphis flies and their progenies appeared rather obstinately in England and had to be combated. An attack of red spider was appearing shortly before picking and remained without

serious consequences.

Hot and dry weather throughout the growth favoured an excellent crop, free from diseases, which was picked from August 24th to September 21st, 1933. East Kent, Worcester and Herford harvested the hest qualities, surpassing the 1932 crop considerably in quantity (24,192,000 lbs. against 21,056,000 lbs.) and reaching it nearly as to quality and colour. Due to the great dryness during the growth, the hops resulted often broken.

The Quality of the English Crop 1933 was judged as follows: prime 60%; middle 35%, inferior 5%. As the total 1932 crop was sold out at prices of 260 to 265 s. already in May 1933, the Hop Marketing Board declared at the beginning of July 1933 that all good non-quota hops of the 1933 crop would be taken over as well. The acreage was but little larger than in 1932, being increased to 16,895 acres with an average yield of 1,433,6 lbs. against 1,276,8 lbs. in 1932. On October 27th the crop was given free to the trade by the Hop Marketing Board (H. M. B.) at prices from 230 to 330 s. for Goldings, 220 to 300 s. for Golding varieties and Fuggles, each sort divided into 4 qualities. The English crop was to be at the disposal of the breweries in England and Colonies until December 15th and after it for general export. Within 8 days about 110,000 pockets were sold, out of the 127,258 pockets ($1\frac{1}{2}$ cwt each), in hands of the H. M. B. and in 4 days more the whole rest of the crop, so that the total crop was disposed of within 12 days, not considering small quantities remaining in hands of the trade.

The increasing output of the English brewing industry made necessary additional purchases of foreign hops from Jugoslavia, Poland, British Colombia and of about 20,000 bales from U. S. A., mostly choice Oregon Fuggles, at prices from £ 14 to 16, duty paid, in the time between September 1933

and May 1934.

The demand for the English crop 1933 surpassed the offer, the trade being often compelled to adapt the orders to the deliveries of the year before. The English breweries found the prices for the 1933 English crop too high, but their complaint before the Government was rejected.

		English Imports:	English Exports:
1st Sept. 1931—31st Aug. 1932		5,777,235 lbs.	2,230,558 lbs.
1st Sept. 1932—31st Aug. 1933		1,822,267 lbs.	2,705,850 lbs.
1st Sept. 1933—30th April 1934		6,003,035 lbs.	1,664,681 lbs.

In June 1934, the differences between the brewing industry and the hop growers were settled by an agreement, valid for the crops 1934-1938. A committee, consisting of representatives of the brewing industry, the H. M. B. and the Government, was given the following tasks: To determine in April of each year the estimated total demand for English hops of the coming crop. The brewers have to state to the Brewers' Society 662/3% of the quantity which they contract from the Hop Marketing Board already in April. At the same time they also estimate the total requirements of all hops of the current year's crop, from which the total quantity of imported hops and the surplus stocks of hops are to be deducted. To take over the remainders of the last crop, an additional charge of 10 s. a cwt. shall be collected in favour of a levy fund which will be placed at the disposal of the committee, The joint committee will advise as to the methods of determining the costs of production of hops, and determine the grades and prices of each season's crop. They have to fix the date on which general trading in hops may commence. It has further to make recommendation to the Government in respect of the importation of hops and adjust, should the occasion arise, the average agreed price. The Committee will advise the growers as to the nature of the hops required by the brewing industry and as to the amounts of the demand for the several varieties.

The quantity of quota hops for any year will be equal to the estimated total market demand for English hops that year less the amount of the previous year's estimated total market demand remaining unsold. Hops produced in excess of the estimated total market demand, that is, non-quota hops, will have no guaranteed market, but the brewers will be able to purchase any hops they choose from the whole stocks in the hands of the Hop Marketing Board, irrespectively of whether they are quota

hops or non-quota hops.

Belgium.

England.

Regulation of the English Hop Market

In each season a date shall be fixed, not later than 28 days after the commencement of trading, before which no sale of English hops of the current year's crop shall take place except in fulfilment of the firm contracts entered into by each brewer.

The imported hops shall not exceed 15% of the total estimated market, exceptions may be allowed.

The average price for English hops of the crops 1934—1938 is to be £ 9 (\$ 45.—) a cwt. (including factor's commission and the Hop Marketing Board's expenses), unless such average price is adjusted for any particular year's crop by a decision of the majority of the Permanent Joint Committee in the event of an alteration of 15 per cent. or more in wages. There shall be added to this price the above mentioned levy of 10 s. a cwt., to be collected up to maximum $33\frac{1}{3}\%$ of the total demand for English hops.

The cost of production per acre is said to be about £ 80 to £ 120 according to the circumstances. There are 1040 hop growers in England.

As to the rate of profits to the hop grower, which rate must be added to the cost of production in order to determine prices, the Committee recommend that an addition of 20% should be adhered to. The Committee are of the opinion that the imports of hops can only be achieved by means of a system of licences.

The representatives of the Brewers' Society have pointed out that the arrangement proposed under the agreement represents a notable concession by the brewing industry. They maintain that there is no precedent for asking a trading concern to enter into a contract to purchase for a number of years at a fixed price a certain quantity of its requirements of raw material without some guarantee as to quality. The Committee recognize that it is impossible to require brewers to accept hops of inferior quality which cannot be used for brewing beer of the quality they desire. In addition to the safeguards already indicated, they suggest that independent arbitrators should be appointed by the Permanent Joint Committee when occasion arises to determine whether certain hops are or are not marketable.

The brewing industry of the Irish Free State has the possibility to become parties to the agreement on the same terms as the English brewers.

United States.

In Oregon, a wet spring caused a strong attack of lice and appearance of downey mildew. Dry heat in summer made disappear the latter, but not totally the blight which damaged the crop by black mould. Picking lasted from August 25th until September 15th, 1933 during favourable weather, except the last week brought heavy rainfalls. The quality was rather uniform, but considerably behind that one of 1932.

The Yakima district suffered much from cold and windy weather during the growing period as well as during picking (from Sept. 3rd—25th 1933), the crop resulting smaller and of inferior quality than the year before. Yakima has very dry climate so that downey mildew when showing up, rarely causes important damage. The younger plants produced a better quality than the older ones. The average yield of the new plants came up to about 1300 lbs. per acre, in some cases even to 3000 lbs.

In Western Washington rainy weather was prevailing during the growing period and picking, consequently the crop resulting a small one and of poor quality. Downy mildew was not being combated, 50% of the crop was damaged and remained unpicked.

In consequence of the regular appearance of downey mildew the English Clusters are being substituted by Fuggles which variety inclines far less to infection.

In California, climate and weather conditions in 1933 were favourable to the growth. The Sacramento district suffered under the usual great heat in July, but the plants were able to make up damages before picking began. The Sonoma district suffered from lice in July 1933 on account of fogs, 60% of the whole crop resulted impaired by black mould. Downey mildew did not show up. Harvesting lasted from August 20th until September 25th 1933. Colour and quality were not so good as the year before the cones were unequal and impaired by downey mildew and mould.

The State of New York produced only 70 bales in 1932 (200 lbs. each).

Quality of the 1933 was judged as follows:	first-rate	middling	inferior
	%	%	%
Oregon	30	40	30
Yakima	40	50	10
Western Washington	-	20	. 80
California	30	40	30

On Sept. 1st, 1933, the remaining stocks of 1932 crop and former years amounted to 8,842 bales against 11,600 bales the year before. In December the crop was estimated at 36,440,000 lbs. or 182,000 bales (Washington 6,324,000 lbs., Oregon 19,556,000 lbs. and California 10,560,000 lbs.). The average yield was: Washington 2,040 lbs., Oregon 1,150 lbs., California 1,650 lbs. per acre, resulting a total average of 1,375 lbs. The trade's estimates were 11,000 bales higher.

Since the top prices of 90 c. for 1932 hops in May 1933, prices came down to 65—75 c. by end of June, 57—62 c. in July, 47—51 c. in August and to 50—45 c. in September. Many American breweries had covered their needs already in summer 1933 or had closed contracts for the next 3 to 4 years so that the home market with the 1933 crop, 30% larger than last year, remained very quiet from September to November 1933.

Although England bought in September large quantities of Oregons at prices from 38—40 c., these purchases could not influence the backward tendency. At the beginning of October, prices ranged between 41–45 c., end of October from 35–40 c., in November from 32–43 c., in December from 32–42 c.,

in January and February 1934 from 30—39 c., in March: 29—38 c., in April: 27—36 c. and in May: 29 to 38 c. From Sept. 1933 to March, 1934 USA. imported from England 3,314,760 lbs. against 1,346,802 lbs. in 1932 and exported to England 7,257,937 lbs. against 2,341,520 lbs. the year before. On January 1st, 1934 70,000 bales against 35;000 of last year were still in growers' hands, on May 1st, 1934 48,237 bales of 1933 hops and 8,260 bales of former crops against 10,600 bales of 1932 hops and 6,800 bales of crops previous to 1932.

The hop crop 1933 in U.S.A. was far more different in quality than usual, especially in Oregon and California, and resulted in a wider range of prices. When picking began, growers' prices for 1933 crop were as high as 40 c. for best quality and came slowly down to 25—35 c. according to quality and growth. The producers in California were paid prices from 20—35 c. which can be regarded as favourable in comparison to those for 1932 crop that had begun with 13—14 c., had quickly come up to 28—30 c. in January 1933 and even to 75 c. in June 1933.

The acreage has been increased in Oregon by 3000 acres, in Washington by 1200 acres and in California by 1130 acres since the 1933 crop.

	U. S. A. Imports:	U. S. A. Exports:
1931:	1,077,315 lbs.	3,796,941 lbs.
1932:	1,299,698 lbs.	3,006,476 lbs.
1933:	5,957,302 lbs.	6,708,865 lbs.

The hop culture in New Zealand is free from diseases. In March 1934 a good crop of 900,000 lbs. (85% prime, 10% middle, 5% inferior) was picked. The acreage has been increased by 50 acres to a total of 700 acres.

New Zealand.

In Australia the import of hops has been prohibited in order to prevent that downey mildew is brought in.

Australia.

World's Hop Consumption 1933/34.

	Beer-Production 1933 american barrels	Dose of hops per barrels in pounds	Hop Consumption in 1000 pounds
Austria and Hungary	2,289,592	0,67	1,534
Balcan	116,737	0,64	75
Baltic States	412,416	0,71	293
Belgium and Luxembourg	12,625,566	0,58	7,322
Czechoslovakia	6,786,124	0,77	5,225
Danzig	54,534	0,77	42
Denmark	1,723,798	0,42	724
France	15,082,170	0,45	6,787
Germany	29,084,877	0,60	17,451
Netherlands	1,371,029	0,55	754
Norway	339,136	0,55	186
Poland	886,184	0,77	682
Roumania, Jugoslavia	488,253	0,77	376
Russia	3,152,770	$0,\!64$	2,018
Saar-Territory	632,258	0,60	379
Spain, Portugal, Italy	926,233	0,64	593
Sweden	2,060,378	0,42	865
Switzerland	2,061,230	0,51	1,051
Continent	80,093,285	_	46,357
Great Britain	19,951,069	1,29	25,737
Irish Free State	2,506,026	1,94	4,862
Europe	102,550,380	_	76,956
Africa	375,775	0,90	338
Australia and New Zealand	2,271,698	1,16	2,635
Canada	1,661,595	0,97	1,612
Central America	718,318	0,64	460
Eastern Asia	1,741,693	0,64	1,115
India	69 020	1,16	80
South America	2,684,115	0,77	2,067
United States of America	33,346,933	_	24,244
World's consumption	145,419,527	_	109,507

Contracts.

In 1934 there was little interest in contracts on futures in comparison with the year before. — In Belgium prices ranged from bfrs. 800 in January to bfrs. 650 in May and bfrs. 750 in June for delivery in October/November. — In U. S. A. there were offers from growers in May at 20 c. for one or several years' crop; prices on contracts have a rising tendency. — The restrictions that went into effect by law in Jugoslavia and Czechoslovakia made almost impossible contracts on futures.

Growth of the 1934 Crop.

The winter in Germany was long but with little snow, the afterwinter rough and cold, so that a larger part than ever of the young plants did not come out. The work in the dry fields started early. Weather in April and May was exceptionally warm and dry, consequently the plants growing quicker than usually. The young 1933 plants and particularly the 1934 ones suffered much under the exceeding drought. From March 1st to middle of June we registered only 123 mm precipitation on our hop farm "Barthhof" against 342 mm of last year. In spite of the dryness a strong attack of downey mildew was reported in consequence of night dews, impairing principally the young plants in the vallies and lower sites; careful growers sprayed 5 to 6 times up till now. In Germany the older plants are in sound condition; side-shoots, however, are scarce. Cold nights in May and June retarded the growth. Mice and grub-worms caused considerable damage; red spider is existing in sandy sites and will be dangerous when the drought is lasting on.

In Czechoslovakia farmers complain even more than in Germany about the continuous dry heat that influenced the growth very badly. There were only 70,3 mm precipitation since beginning of March till middle of June 1934 in comparison to 100,7 mm. in 1933, which was already below the average of normal years.

In Jugoslavia plenty rains had fallen at the beginning of June so that the hop gardens, endangered by the drought, recovered their good appearance. End of May a hail-storm afflicted the hop plantations in Slovenia. The general picking started towards the 10th of July and will probably last very long. The first hops were picked in the Backa district already as early as beginning of June. The aspect of the plants varies much, downey mildew is stronger in Slovenia than in former years, and the crop prospects for this district are unfavourable. Also in the Backa a smaller yield than last year is expected.

Poland reports unequal growth.

In Alsace the hops developed favourably in spite of the drought.

In nearly all Central European hop districts the plants began to bloom already end of May or beginning of June, that is to say at a time so early which history of hop culture never has known before. The growers are seared at this premature blossoming that began 5 weeks earlier than usually. Up till now the general opinion was that the development and growth of the principal vines and side-shoots were finished as soon as the blossoming was over. It depends now on the weather conditions if the premature bloom will transform into proper cones. Heavy rains are badly wanted to give new impulse to the slowly growing plants. Picking will start during July and is bound to last longer than in normal years, as blossoms and cones are on the plants at the same time.

In England in spite of the drought the plants are in favourable condition and a good crop is expected.

In the Pacific States of U. S. A. warm to hot temperatures were already prevailing since February. Downey mildew presented itself early and abundantly in Oregon and, for the first time, in Sonoma, Cal. and State of New York. In Western Washington the easily affected Clusters and red vined varieties were rooted up and replaced by Fuggles. The last reports in June from districts attacked by downey mildew were still unfavourable, so that the tendency of the market in U. S. A. is a strong one.

Joh. Barth & Sohn.