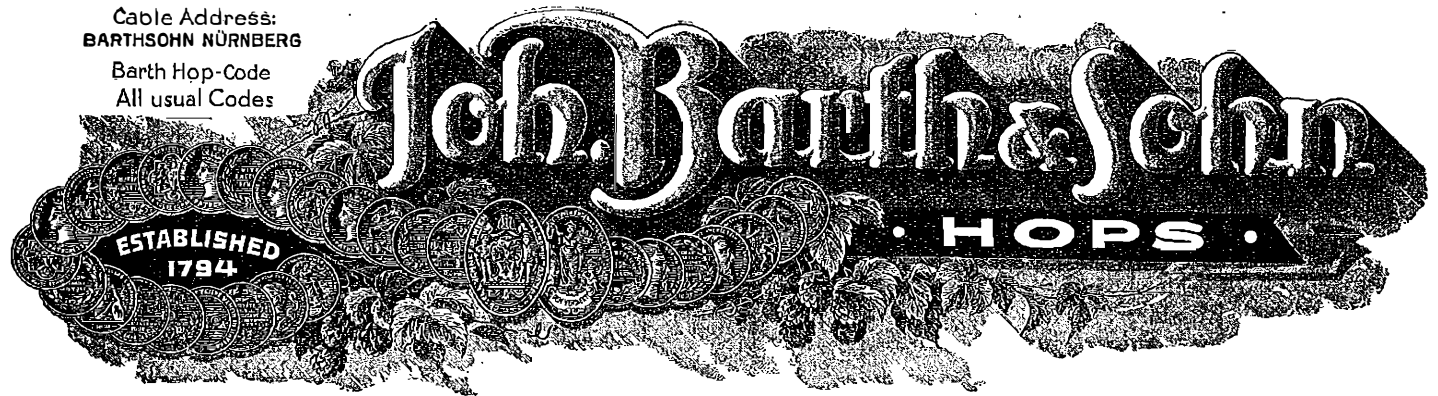


Cable Address:
BARTHSONN NÜRNBERG

Barth Hop-Code
All usual Codes



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

Nuremberg, Germany

July 22nd 1935

Hop Report for 1934/35.

The immense confusion, into which the international exchange of goods became entangled, has increased during the last year. The tariff war, the economic struggle, the barricades of the different countries through contingent their imports, the difficulties as to the transfer of payments and, last not least, the clearing contracts that are running themselves to a dead point, are against the recovery of the international of the international debts and the abolishment of the economic protectionism.

More and more the merchant's time is absorbed by the study and the worries to obey all the decrees that are being invented in all variations by the different countries in order to regulate their exports and imports, payments and transfer, instead of leaving him time to look out for new markets.

In 1934, a retrograde beer consumption could be noticed in a number of countries where the world's crisis set in later e.g. Algier, Belgium, France, Netherlands and Venezuela. In other countries, the retrograde beer consumption could not be brought to a standstill, e.g. in Bulgaria, Esthonia, Italy, Jugoslavia, Lithuania, Austria and Turkey.

Beer Produktion.

The list of the countries with rising beer consumption is larger than in 1933. The consumption rose in 1934 in Brazil, Chile, China, Czechoslovakia, Denmark, Ecuador, Free State of Danzig, Finland, Greece, Japan, Livoania, Peru, Poland, Spain, Sweden, Switzerland, South Africa and Uruguay.

Columbia states a further rise of 87 p.c., Cuba a further of 34 p.c., Mexico of nearly 30 p.c., Great Britain and Egypt of 8 p.c. each, Argentine of 2 p.c. In U.S.A., the consumption together with the improvement in quality could experience a particular big rise of 28 p.c. against 1933. For 1935, a production of 50 million barrels is expected.

In Germany, the beer consumption in 1934 rose by 7,7 p.c. against that one of 1933, in consequence of warm and sunny weather since March 1934 and, last not least, due to the strong reduction in the number of unemployed on account of the respective measures taken by the Government.

On Febr.1, 1935, Prohibition in Iceland, in vigor since 1912, was revoked. This was the last country with Prohibition in Europe. The content of alcohol in beer is limited to 2½ p.c.; Whisky and Brandy, however, can be bought without restrictions at Governmental sales offices.

The world's beer production in 1934 is given with 158,1 million barrels against 145,4 million barrels in 1933.

The following table shows the development of the world's beer production since 1929, in which time the different countries have been affected more or less by the world's crisis. For comparison we add the years 1913 and 1920.

In case of reproduction give credit to Joh. Barth & Sohn.

World's Beer Production

in the years of 1913, 1920, 1929/1934 in 1000 American Barrels.

	1913	1920	1929	1930	1931	1932	1933	1934
United States of America	65,318	7,996	6,817	23,859	21,302	21,302	33,347	*42,816
Germany	59,965	21,829	48,593	41,315	31,607	28,614	29,084	*31,390
Great Britain	50,108	38,193	27,087	26,219	22,826	18,438	19,951	*21,633
Austria	19,350	511	4,495	4,331	3,736	2,606	2,149	2,061
Belgium	14,253	8,868	13,103	14,198	15,659	13,257	12,270	11,75
France	10,944	9,840	14,959	15,605	15,829	15,020	15,082	*14,297
Czechoslovakia	—	3,301	10,363	9,722	18,567	8,221	6,786	6,808
Russia ¹⁾	8,638	—	1,704	2,556	3,843	2,556	3,153	3,153
Irish Free State	—	—	2,965	3,121	2,666	2,368	2,506	* 2,491
Australia	2,502	2,430	2,854	2,578	2,155	1,930	2,034	—
Switzerland	2,530	910	2,165	2,224	2,233	2,152	2,061	* 2,100
Sweden	2,306	1,722	1,749	2,541	2,416	2,391	2,060	* 2,070
Poland	—	—	2,374	2,144	1,645	1,193	901	* 939
Denmark	2,100	2,023	1,805	1,952	1,885	1,708	1,724	* 1,841
Canada	2,005	1,431	2,380	2,261	1,789	1,661	1,454	—
Netherlands	1,517	1,022	1,937	1,973	1,943	1,792	1,371	* 1,289
Argentina	852	1,272	1,688	1,817	1,558	987	1,114	* 1,145
Saar-Territory	—	—	885	872	744	660	636	635
Brazil	596	699	1,505	1,505	1,241	724	767	788
Italy	573	809	960	768	612	338	340	* 317
Hungary	—	418	513	380	266	157	140	* 142
Jugoslavia	—	511	511	511	460	272	183	179
Norway	439	762	434	447	355	362	339	* 342
Mexico	426	256	579	613	612	356	443	* 573
Luxembourg	—	—	447	480	423	363	347	360
Chili	417	352	443	421	316	313	332	* 378
New Zealand	387	—	496	494	446	378	341	* 342
Japan	341	1,065	1,363	1,391	1,166	1,175	1,438	* 1,489
Roumania	267	144	739	538	356	356	305	* 377
Finland	—	—	284	361	285	252	249	* 295
British South Africa	256	298	297	275	267	233	230	* 279
Spain	264	257	634	676	634	613	538	638
Cuba	217	170	342	174	135	136	147	* 198
Bulgaria	141	118	71	43	41	77	51	* 39
India	145	137	100	81	75	69	59	—
Livonia	—	—	81	76	60	53	53	* 65
Lithuania	—	—	86	98	96	61	60	* 51
Turkey	83	85	34	35	31	27	19	* 18
Esthonia	—	—	76	59	49	44	51	* 43
China	68	52	51	82	71	86	83	* 89
Uruguay	67	76	162	129	125	102	88	* 99
Peru	55	133	111	123	89	60	59	* 75
Ecuador	47	48	70	68	51	40	45	* 55
Columbia	47	72	268	170	110	121	170	319
Egypt	44	60	62	48	42	33	38	* 45
Bolivia	43	126	70	56	42	36	39	39
Danzig	—	—	—	—	41	66	54	* 69
Portugal	34	48	85	71	50	48	50	47
Philippine Islands	32	46	34	34	34	34	34	30
Algeria	30	30	85	119	119	92	96	* 77
Venezuela	30	25	128	94	100	55	60	* 47
Panama	25	43	64	69	146	75	64	* 58
Congo	—	—	19	27	19	11	11	* 11
Paraguay	24	20	16	16	10	8	8	* 6
Greece	21	25	59	81	72	56	46	* 65
San Salvador	—	—	17	17	14	18	20	20
Costa Rica	—	—	15	12	10	8	12	* 9
Guatemala	12	8	25	9	8	6	7	* 6
Honduras	—	—	12	10	8	8	14	14
Haiti	—	—	4	4	3	2	2	* 2
Jamaica	—	—	4	3	2	2	2	3
Nicaragua	—	—	2	8	9	5	4	* 5

¹⁾ The figures for 1929—1934 are estimates only.

*) official figures.

In Germany, the winter 1933/34 was long but with little snow. The uncovering of the plants in the dry fields was started early. More plants than usual failed to appear. The warm and dry weather in April and May 1934 (in April already temperatures of 68—86° Fahrenheit) favoured quick growth so that the fleas which appeared at first abundantly, did not do any harm. Since middle of May, in most of the German hop cultivating districts, farmers began to spray against downy mildew that made its appearance especially among the young plants in spite of the lasting dryness, but in consequence of night dew.

Growth of the
1934 Hop Plants
in Germany.

The seedlings laid out in 1933 and 1934 suffered much under the continuous want of humidity; consequently many of these young plants decayed. Already in May 1934, red spider was noticed in some sites of the Hallertau, Jura, Hersbrucker Gebirge and in Baden. As early as end of May, the plants on heavy soils had reached more or less top wire. At that time, three and a half weeks before the normal beginning of bloom, the first although irregular blossom was to be seen. In spite of it the plants continued to grow; only when the principle shoot ended in a flower, the plant finished its growth in height.

Drought.

Early Bloom.

The consequence of the unusual drought increased, the growth seemed to be at a standstill, the side-shoots left to be desired, and the leaves turned up. More and more plants began to bloom although the bloom itself hardly made any progress. Grub worms, cockchafer and many other insects damaged the plants. Red spider spread, but was not paid sufficient attention except by a few farmers. The drought continued in July and favoured the further propagation of red spider. Now, but already too late and without success, it was generally combated through spraying with sulphuric lime and 1 p.c. solution of Erysit.

Beginning of August 1934, in the Hallertau district flowers up to the finished burr could be found at the same time at one and the same plant, so that already the first days of August an emergency picking took place, principally in those districts which were particularly attacked by red spider. The result was 1—2 cwt. per 1.000 plants. Abundant rains at the beginning of August and fogs improved the condition of the late gardens and stopped the red spider.

General picking set in Aug.15,1934. The crop was underestimated at first on account of the very unequal condition of the different sites. Favourable weather during picking time improved the conformation of the cones and thus the yield became larger. The quality of the 1934 Hallertau hops was lighter and more unequal than in normal years, the colour green and spotless with the exception of the hops damaged by red spider. The year 1934 was the driest for many years in the Hallertau and also partly in the Spalt district. The precipitation on our hop farm Barthhof (Hallertau) was from January till Aug.20,1934 only 337 mm against an average of 460 mm during the last 25 years and 455 mm from January till end of June 1935.

German crop.

The Spalt district was favoured in growth in spite of the drought, and the yield was good up to very good, both in quality and quantity. The Spalt Kreis however was rather weak. Picking lasted from Aug.23 till Sept.16,1934.

The Hersbrucker Gebirge, the Aischground and the Jura district had more rain than the southern part of Bavaria, so that the plants, very unequal at the beginning, could improve in time. The Hersbruck district harvested a surprisingly high yield of well treated product.

The Tettwang district suffered under the drought till June 1934 and owing to the wide spread of red spider, the yield was but a small one. The emergency picking of the early hops in gardens damaged by red spider, started already on July16,1934, whilst the general picking began on Aug.1,1934. The product was unequal, frequently of unsatisfactory quality and disappointed in comparison to the years before.

The Wurttemberg Underland and Baden had abundant rains end of June 1934, which favoured the conformation of the cones and the yield was good to very good in both districts. These hops found new friends on account of their prime quality.

In Germany, 85,515 lbs., remained unpicked because of inferior quality.

To regulate the hop acreage, a special permit from the Government is required for planting seedlings and attaching same to the poles, since March 14, 1935. The hop plantations receive boards with the name of their owners, the acreage and the number of plants set out. On account of this decree, it will be possible to register the exact hop acreage of Germany.

Exact German
Hop Acreage.

Hop Acreage and Production.

Producing countries	Acreage in acres				Yield per acre in pounds				Our estimate of the yields in 1000 pounds			
	1931	1932	1933	1934	1931	1932	1933	1934	1931	1932	1933	1934
Hallertau	13,252	10,428	12,664	13,089	849	796	1,265	602	11,251	8,309	13,251	7,625
Spalt	3,434	2,908	3,272	2,639	375	549	400	647	1,289	1,598	1,173	1,710
Hersbruck	2,938	2,110	2,617	2,639	97	365	441	758	287	771	936	1,991
Aischgrund	499	301	402	363	154	182	107	348	77	55	30	127
Jura	227	153	193	198	194	287	356	423	44	44	54	82
Bodensee	49	42	44	44	449	262	785	673	22	11	32	30
Rheinpfalz and other districts	882	652	650	450	375	371	433	722	331	242	284	326
Bavaria	21,281	16,594	19,842	19,422	625	664	887	611	13,301	11,030	15,760	11,891
Wurttemberg	3,177	2,547	3,064	2,987	454	640	837	830	1,444	1,631	2,094	2,483
Baden	818	622	694	714	295	532	723	575	242	331	452	400
Prussia etc.	46	34	37	40	480	647	955	647	22	22	22	25
Germany	25,322	19,797	23,637	23,163	592	657	923	647	15,009	13,014	18,238	14,799
Saaz	22,533	18,149	19,308	22,078	902	686	499	736	20,387	12,397	9,069	11,240
Auscha	3,420	3,044	3,044	3,450	1,089	846	865	830	3,725	2,579	2,612	2,535
Raudnitz	2,387	1,863	2,172	2,382	881	615	816	566	2,105	1,146	1,499	1,234
Dauba	516	308	255	356	726	896	865	1,048	375	276	220	330
Moravia etc.	1,028	546	591	670	557	606	561	410	573	331	308	242
Czechoslovakia	29,884	23,910	25,370	28,936	905	695	571	611	27,165	16,729	13,708	15,581
Alsace	4,541	3,410	3,323	3,546	121	387	753	1,378	551	1,322	2,479	4,694
Burgundy and Lorraine	1,415	771	813	840	350	415	672	945	496	320	540	771
Northern France	479	395	447	556	576	1,423	1,614	1,574	276	562	639	705
France	6,435	4,576	4,583	4,942	205	481	793	1,342	1,323	2,204	3,658	6,170
Poland	6,177	5,387	6,178	6,425	642	654	602	660	3,967	3,526	3,637	4,077
Wojwodina	2,471	1,482	2,100	3,645	490	817	606	803	1,212	1,212	904	2,336
Slovenia	2,718	2,965	2,842	3,707	892	687	918	647	2,424	1,873	2,623	2,380
Jugoslavia	5,189	4,447	4,942	7,352	700	688	789	954	3,636	3,085	3,527	4,716
Russia	4,942	2,965	2,471	2,471	557	557	579	579	2,755	1,653	1,433	1,433
Belgium	1,729	1,210	1,408	1,777	674	956	1,458	1,962	1,157	827	1,818	2,457
Various countries	988	370	370	741	446	600	600	600	441	220	220	440
Continent	80,666	62,662	68,959	75,807	687	655	731	718	55,453	41,258	46,329	49,673
England	19,528	16,531	16,984	18,038	969	1,273	1,462	1,716	18,928	21,056	24,244	28,983
Europe	100,194	79,193	85,853	93,845	758	784	887	914	74,381	62,314	70,573	78,656
United States of America	21,400	22,000	30,294	35,830	1,354	1,127	1,859	1,480	26,410	24,120	40,002	44,962
Canada	925	990	1,082	1,154	1,329	855	1,494	1,288	1,230	791	1,477	1,399
Australia and New Zealand	1,070	1,643	1,643	1,754	2,060	2,162	1,605	1,810	2,204	2,314	2,645	2,975
World's production	123,589	103,826	118,872	132,583	856	891	1,106	1,074	104,225	89,539	114,697	127,992

Quality of German hops was judged as follows:

	prime:	medium:	inferior:
	p.c.	p.c.	pc..
Hallertau	10	75	15
Spalt	50	40	10
Hersbruck Hills	35	50	15
Tett nang and Bodensee	10	60	30
Remaining Wurttemberg and Baden	40	40	20

	German Hop Imports:	German Hop Exports:
Oct. 1st, 1932—Sept. 30th, 1933	5,127,385 lbs.	7,010,924 lbs.
Oct. 1st, 1933—Sept. 30th, 1934	3,801,018 "	8,233,703 "
Oct. 1st, 1934—May 31st, 1935	5,519,918 "	5,333,459 "

On Aug. 20, 1934, prices for German hops were fixed by the Delegate for the Hop Market Regulation of the Reichsnährstand (R.N.St. = Official Board of Alimentation) from RM. 210—320 per 50 kilos, prices to growers; the buyer had to deliver another RM. 10 to the German Hop Traffic Company.

Owners of a certificate of qualification only, issued by the R.N.St. are entitled to buy German hops from the producer. The purchase of every lot has to be notified to the R.N.St. The dealer's net profit is not to exceed RM. 10 per 50 kilos.

The purchase at the farmers was free till Nov. 1, 1934 for owners of a certificate of qualification. Unrestrained selection by the buyer was warranted, thus giving to the grower the advantage of higher prices when their hops were well cared of in quality, picking and curing.

Prices for the German 1934 Crop.

Buying set in with a strong demand; the prices began in the Hallertau at RM. 210—260 and stabilised middle of October 1934 from RM. 210—270. At that time, the best quality hops were nearly sold out; by end of October, one had to pay up to RM. 290 and more for best obtainable Hallertau hops.

In the Spalt district, prices began on Sept.8,1934 at RM. 290—320 and at rising prices the whole Spalt district was sold out within two weeks.

In Tettwang, the best quality hops were bought at RM. 280—320 and then prices fell. Buyers refused to take the remainders for first class hops, as these stocks were often badly picked and damaged by red spider. Later on they were bought at RM. 210—250.

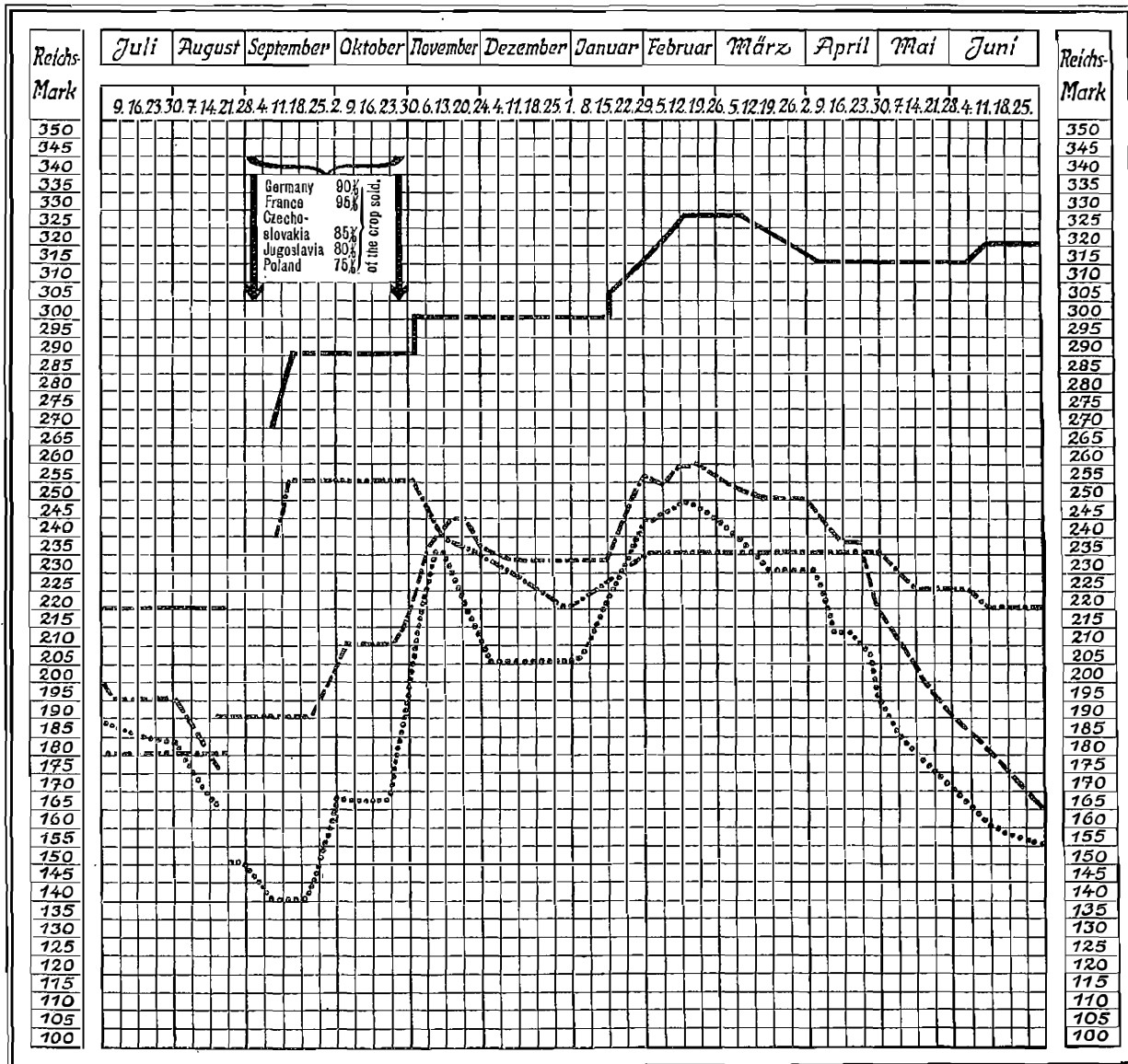
The Wurttemberg Underland was cleared off slowly at prices ranging between RM. 210—250. In Baden, prices ranged between RM. 220—260. The hops of the Hersbruck district found a very slow market at prices from RM. 210—230.

From Nov.1,1934, the buying up of the remaining stocks of the 1934 German crop was transferred to the German Hop Traffic Company which took over 1,388,960 lbs.

In the course of our statistical year, several decrees have been issued to regulate the culture and sale of German hops. Since April18,1935, hop growers and dealers are incorporated into the Union of the German Brewing Industry that has to assume in future the responsibility for a proper accomplishment of the culture of hops, their marketing, sale and respective regulation of prices.

The following table shows the movement of prices for Saaz and Hallertau hops with seal and certificate for the remainders of the 1933 crop in July and August last year and of the crop 1934. These growers' prices are to be understood per cwt of best available and middling quality.

Movement of Prices 1934/35.



————— Hallertau choice quality - - - - - Saaz choice quality
 - . - . - ,, fair average quality ,, fair average quality } per cwt.
 RM. 100 = approx. \$ 40.— (July 1935).

Regulated
German Hop
Acreage.

The productive German hop acreage for the 1935 crop amounts to 21,250 acres and about 1,729 acres supplementary surface that has to disappear after the 1935 crop, unless a permit is granted. The hops set in 1935 that will give full yield for the first time in 1937, amount to 2,223 acres. These figures are subject to small alterations as the Reichsnährstand (Official Board of Alimentation) endeavours to neutralise any unfairness that may exist as to acreage of the different farmers.

The statements received hitherto from the farmers about the German hop acreage proved to be too high according to the exact examination by the Reichsnährstand. On the other hand, those gardens cultivated without permit were not contained in the acreage but only in the yield; therefore we raise the average yield to 758 lbs. per acre.

Higher Domestic
Demand.

The present productive German hop acreage with about 22,980 acres admits a normal yield of 17,411,600 lbs. for 1935, on a average of 758 lbs. per acre against a possible year's domestic demand of about 19,200,000 lbs. from part of the German brewing industry that has but small stocks. An exceptionally high yield 1935 will be necessary to cover this demand plus exports. The German hops have many friends abroad, and in competition with the Czechoslovakian product, the foreign consumers prefer either of these two brands to any other one in the world on an international price basis.

World's Hop
stocks
end of June 1935.

In Germany, the stocks in hands of the D.H.V.G. (German Hop Traffic Company) amounted end of June 1935 to max. 220,400 lbs. 1934 hops and about 881,600 lbs. 1933 hops; there are no stocks at dealers.

In Czechoslovakia, there will be max. 297,540 lbs. 1934 hops, 220,400 lbs. of which are Saaz hops and the rest Auscha and Raudnitz hops. Besides there exist about 154,280 lbs. of the 1931/33 crops, further 2,755,000 lbs. 1930 hops are the remainders of 6,612,000 lbs. that have been taken over by a syndicate; a great part of these hops have been destroyed, the Government guarantee is liable with 23,5 million Czech-crowns.

In Poland, there are still 220,400 lbs. 1934 hops.

In Jugoslavia, the stocks amount to 143,260 lbs. in the Backa, and 44,080 lbs. in Slovenia. France and Belgium are practically sold out.

The stocks at German brewers have decreased considerably on account of the small German crop 1934 of round 14,800,000 lbs., against a domestic demand of 19,000,000 lbs., considering the average stocks they will only suffice till January 1936. The dose of hops is 0,60 pounds per barrel with a beer production of 31,389,660 American barrels in 1934/35.

The stocks in the foreign breweries will be smaller everywhere than in previous years. The world crisis, the abnormal high prices for 1934 hops, the uncertainty about the future development of the beer consumption have led in all countries to a decrease of the breweries' stocks, notwithstanding the brewmaster's general desire to use principally new hops for „Lagerbeer“. The stocks on the open market in 1934 Central European hops amount end of June altogether to 880,000 lbs., mostly of inferior quality, and the demand will therefore depend exclusively on the result of the 1935 crop. — Whereas the present demand of Central European hops for low fermenting beers corresponds to a normal yield, that one of hops used for high fermenting beers, specially in England, U.S.A. and Australia, is largely in excess. — The stocks of the 1934 crop in England amount at present to more than 3,300,000 lbs., and the unsold stocks of hops of all growths in U.S.A. to about 80,000 bales of 200 lbs. each, of which about 40,000 bales will be of 1934 crop.

Bitter Principle
of the 1934 Crop.

The analysis of the 1934 hops, made by the Governmental Station of Brew-Technical Experiments at Weihenstephan and by the Station of Scientific Research in Munich, as to their content of bitter principle, has given the following results, to which we add those of 1930/33:

Origin	1930	1931	1932	1933	1934
	Bitter principle without water	Bitter principle without water	Bitter principle without water	Bitter principle without water	Bitter principle without water
	%	%	%	%	%
Hallertau	15,0—19,1	14,2—19,7	15,9—18,9	14,2—16,9	11,9—15,6
Spalt	15,9—19,5	15,6—19,6	15,3—19,5	13,0—16,1	13,0—16,0
Aischgrund	15,0	15,0	15,0—16,3	—	—
Hersbrucker Gebirge	14,1—17,7	15,3—16,4	15,3—18,2	11,5—16,8	12,1—15,6
Wurttemberg	15,2—18,3	15,9—18,7	15,4—20,5	13,4—17,7	14,0—16,4
Baden	14,3—20,2	14,5—18,2	—	15,6—16,2	12,3—12,8
Auscha	14,7—15,8	12,5—15,8	13,1—16,7	13,7—15,8	11,5—12,5
Saaz	14,4—15,8	13,7—16,7	14,2—16,8	12,7—14,1	12,2—15,4
Alsace-Lorraine	15,3	—	16,5	12,9	13,4—14,4
Styria	15,6—16,7	12,4—13,5	13,5—15,3	12,1—13,2	14,1
Backa	14,9	12,6—14,0	14,5—16,7	15,7—16,4	14,9
Poland	15,7—16,4	13,0—14,5	13,2—15,5	12,4—13,7	11,3—12,7

Considering the 1934 crop in Central Europe, we come to the following statements:

1. The long and continuous drought in 1934 made the plants suffer more than usual. Conformation of cones was unequal, mostly smaller than normal, and the quality of the crop was generally lighter.

Facts about 1934
crop in Central
Europe.

2. The bitter principle of the 1934 hops was the lowest for years and a higher dose of hops was required to obtain the same bitterness and conservative character of the beer.
3. Poland and Jugoslavia had to pay dear for their indifference as to downy mildew. Large parts of their respective crop lost value through discolouring and bad growth.
4. Red spider (*Tetranychus telarius* L.) has to be considered the most dangerous enemy of the hop plant on account of the quick spread and propagation and, last not least, its obstinacy during hot and dry weather.

Growth of the
1934 crop in
Czechoslovakia.

After a winter with little humidity the uncovering of the plants started already end of March 1934. The young plants grew rapidly because of the warm weather, those uncovered late had to suffer under fleas. Lice were noticed abnormally early (May 10, 1934). Vermin like weevils, hair-worms, wormal, caused damages in and beyond the soil. Middle of June, red spider appeared and was insufficiently combated with sulphuric lime and Solbar. The first half of June, the early bloom began. The drought that lasted nearly ten weeks, was only interrupted through insufficient rainfalls towards end of June. Beginning of August, the emergency picking started in the sites afflicted by red spider. The rains since Aug 4, 1934 improved the conditions of the plants considerably. Farmers watered their plantations where it was possible, but when done in excess, the quality was impaired. General picking lasted from Aug. 18 till Sept. 1, 1934 during favourable weather. Precipitation in the Saaz district amounted to only 222,2 mm in 1933 and 292,6 mm in 1934 for the period from January till August in these two dry years.

Colour and conformation of cones of the 1934 crop surpassed the product of the year before considerably, the quality however was not so good. Against 87 Viertel in 1933 (a measure of about 60 pints), 95 Viertel of fresh hops were needed in 1934 for 1 cwt (112 lbs.) dry hops. The valleys of the German Bohemian woody sites and the lower and middle Goldbachtal were favoured.

The Saaz acreage increased in 1934 by 850 acres on account of incorporating 11 border parishes into the Saaz sealing district. The productive acreage in Czechoslovakia for 1934 is given with 27,055 acres plus 1,764 acres of newly laid out gardens against that one of 1933 with 25,370 acres productive surface.

The cost of production for 1 acre has been stated by the Hop Growers Association in Saaz for 1934 with Kc. 5,315 and for 1 cwt with Kc. 1,216.

Auscha: On account of hot weather the plants developed quickly in March and April 1934 but their growth was upset by nightfrosts beginning of May; on low land, whole gardens were frozen. The completely rainless months June and July 1934 impeded normal vegetation, the following rains however brought the buds to full bloom. The long dryness caused great damages through red spider on the plateau of Polepp and the high land; the low land was often watered. The emergency picking started Aug. 10, general picking Aug. 16, 1934 and lasted three weeks during very good weather.

Colour, quality and conformation of cones did not reach the standard of the year before. Precipitation from January till August inclusively amounted to 335,4 mm. in 1933 and 344 mm. in 1934.

The red spider that appears every year in the Moldau valley, caused there and on the Czech plateau of the Raudnitz district considerable damages, so that the quality of the yield left much to be desired.

The Dauba district received more rains and harvested normally.

The quality was judged as follows:

	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Saaz	30	55	15
Auscha	15	65	20
Raudnitz	10	50	40
Dauba	20	60	20

In Saaz, the 1933 hops quoted in August 1934 Kc. 1700—1750. After a first price of Kc. 1800 for 1934 hops on Aug. 16, 1934 prices ranged from Kc. 1300—1800 and stabilised with few fluctuations till end of September. Then prices rose to Kc. 1600—2000. Beginning of November, when the unsold stocks amounted to 1.653.000 lbs., the demand was particularly eager for medium varieties, and middle of November, the price level rose again up to Kc. 2250—2375. Beginning of 1935, prices fell slowly but continuously to Kc. 2200—2350, by end of April 1935 to Kc. 2000—2250, end of May 1935 to Kc. 1650—1850 and end of June 1935 Kc. 1450—1600. The stocks end of June amounted to about 220.200 lbs. The lack of demand in spring 1935 from part of their own Czech brewing industry that carries only small stocks, is partly due to the retrograde beer-consumption which fell during the first three months in 1935 by 11 p.c. against the year before.

In Auscha, prices started end of August 1934 at Kc. 1150—1400 and varied till middle of September from Kc. 1000—1500. At that time, the Auscha district was sold up by 80 p.c. and the Raudnitz district by 70 p.c. Prices rose again till end of December to Kc. 1525—1700. Beginning of this year, vivid demand set in and prices rose quickly to Kc. 2000, to fall later on parallel with those of Saaz and quoted end of May 1935 Kc. 1400—1500, end of June 1935 Kc. 1250—1325 nominally. The prices for Raudnitz hops quoted always about Kc. 50—100 under the price level of Auscha. At present the stocks in Auscha-Raudnitz hops are estimated at 71.000 lbs. — In Dauba, prices set in with Kc. 950—1100 rose towards middle of September with very little stocks to Kc. 1300 and later on, till end of 1934 to Kc. 1500, whilst the amount of business was but a few bales.

Czechoslovakian Exports:

Sept.1st, 1932—Aug. 31st, 1933	13,595,153 lbs.
Sept.1st, 1933—Aug. 31st, 1934	10,296,316 „
Sept.1st, 1934—Mai 31st, 1935	11,489,672 „

Jugoslavia.

Unfavourable and abnormal weather with but few exceptions reigned throughout the whole period of growth. Spring began too early and the plants were pruned already end of March 1934 instead — as normally done — towards the middle of April. The plants suffered much under continuous drought that was interrupted but rarely and insufficiently by rain. Vermin and diseases appeared, and the already weakened plants were terribly attacked by red spider. In all hop gardens bloom set in in May although the side shoots were still undeveloped. The larger part of the early bloom dried up, the smaller part was early ripe in July 1934. At the same time new bloom set in and transformed into cones near Aug.5,1934. Since July 15, an emergency picking on ladders took place. The young plants and the 1934 set out were comparatively healthy and brought forth a better product than the old gardens.

Slovenia: On May 30, 1934, a heavy hail-storm devastated nearly the whole yield of the upper Sanntal which usually gives the best product. The downy mildew was not sufficiently combated; the commendable exception of the farmers of Marenberg may be mentioned who consequently harvested a better quality. The rain and fogs in the first part of August 1934 were disastrous to the colour of the crop as farmers did not spray against downy mildew. The ripeness differed much. Picking lasted from Aug.15 till 31,1934 during unfavourable weather conditions. The discolouring during the picking made fast progress, particularly in the older gardens. It is to be regretted that everything was picked including utterly valueless hops. The product left much to be desired and could not be compared with the colour, quality and conformation of cones of previous years. The average yield was 954 lbs. per acre. The prices opened for the better hops with 3000—4000 Dinars per 100 kg (1500—2000 dinars per cwt). In September, they varied from 1000—4000 dinars, by end of February 1935, from 1500 to 3500 Dinars and end of June 1800 Dinars per 100 kilos (900 Dinars per cwt). Remaining stocks at farmers amounted to 44.000 lbs. 1934 hops and about 330.000 lbs. of inferior qualities of older growths.

Wojwodina: Shortly before the picking that lasted from Aug.27 till Sept.8,1934, the red spider together with heat and drought caused great damages. The young gardens and the newly laid-out ones brought relatively good yield, however the crop was of bad colour; the quality, on the other hand, was uniform and even richer in lupuline than the year before. The product itself was unequal with many stunted cones. About 20 p.c. of the acreage remained unpicked. The average yield was 803 lbs. per acre.

The few hops of prime quality were bought during the picking at 3500—4000 Dinars per 100 kilos; by end of June, 1935, the stocks amounted to 143.260 lbs. and quotations ranged from 1400 to 2000 Dinars. The sale of the medium and inferior qualities was very slow during the whole season. Of old hops of utmost inferior quality 2.755.000 lbs. are remaining.

In opposite proportion to the extraordinarily quick enlargement of acreage during the last years, the quality of the hops has become poorer. At this occasion we remember the different increases in acreage: in Slovenia from 2842 acres in 1933 to 3706 acres in 1934, in Wojwodina from 1482 acres in 1932 to 3645 acres in 1934. — It must be stated that, if the farmers will not take the necessary trouble to spray and wash their product during the growing period, to treat it as carefully as in former years, to pick cleanly and to dry properly, they will have to bear the consequences to their own disadvantage; the former buyers will stay away and the hops will be internationally devalorised. We think it is up to the hop growers associations to lend a helping hand.

Quality was judged as follows:	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Slovenia	5	35	60
Wojwodina	10	40	50

For 1935, a further strong increase in acreage is reported, namely in Slovenia with 370 acres, total now 4077 acres and in Wojwodina with 740 acres, total now 4324 acres.

Jugoslavian Exports: 1st Sept.—31st August

1931/32	3,696,328 lbs.
1932/33	3,503,258 „
1933/34	3,303,796 „

France.

In spite of the continuous heat and dryness, from April till the first part of June 1934, the hop plants in Alsace were in good condition and beginning of June, they reached nearly ¾ of the height of top wire. Spraying against downy mildew was done at first precautionarily two or three times. The aphid flies, the progenitors of the lice that pass over from the orchards (stone fruits only), disappeared soon through warm nights together with hot and dry weather during day time. Blooming set in two weeks earlier than usual i.e. already beginning of July. The yield was satisfactory, damages through downy

mildew were only to be seen at careless farmers' plantations; hail and vehement thunderstorms damaged parts of the crop shortly before the picking that took place from Sept.3 till 26 at favourable weather conditions.

The particular sharp flavour of the Alsace hops is said to be especially pronounced at over-ripe hops. From our experience we may add that, generally spoken, **the riper the hops are, the heavier they are in weight, and the bitter principle is also higher, but at the same time they are less rich in fine flavour.** In connection with this circumstance may be the demand of the international brewing industry for greenest and green hops and the undervalue of yellowish and spotted hops.

Prices set in with ffr. 400—500 per cwt. and rose till end of October 1934 to ffr. 600—800. At this time, the crop was mostly taken over, the remaining stocks were sold in the succeeding months at prices up to ffr. 900.— In June 1935 prices ranged from ffr. 550—750. — Nord: Downy mildew was combated with much energy and success in April and May 1934; the further conditions of the growth were favourable. Under the influence of male plants the yield amounted up to 1574 lbs. per acre. Hop acreage 556 acres, 160 acres of which were young plants. These hops of big, green cones were of poor quality and full of seeds. The rooting of the male plants may appear necessary. — Prices ranged between ffr. 250—400 per cwt.

Quality was judged as follows:	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Alsace	50	30	20
Nord	20	70	10

The acreage 1935 is said to be enlarged in Alsace by max. 5 p.c., in northern France by 3 p.c.

	French Imports:	French Exports:
1932	3,597,216 lbs.	85,792 lbs.
1933	3,554,880 „	634,386 „
1934	2,951,376 „	3,034,026 „

In general the weather was favourable to the growth. The plants were not attacked by downy mildew on account of largely dry weather and did not suffer under drought in comparison to other hop districts in Central Europe.

Belgium.

In Poperinghe, the harvest took place during fine weather from Sept.1 till Sept.17 and gave a good yield of 2006 lbs. per acre in old gardens and 627 lbs. per acre in the new ones. In Alost, picking began on Aug.25, and was completed on Sept.20. The yield of early hops was 1,6 lbs. per plant, late hops gave 1,9 lbs. and young plants 0,8 lbs.

The colour was not so spotless green as in 1933, however the conformity of the cones and the quality were superior. The rooting of the male plants in former years has influenced favourably the quality.

Beginning of September, quotations in Poperinghe were bfr. 700—750, end of the picking bfr. 500—600, the prices rose slowly till end of January 1935 to bfr. 700—750, end of May bfr. 800 per cwt. The prices for Alost hops were a little higher.

Quality was judged:	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Poperinghe	20	75	5
Alost	30	60	10

The acreage 1935 in Alost will have been increased by 20—25 p.c., that one of Poperinghe by 5 p.c.

	Belgium Imports:	Belgium Exports:
1932	5,032,832 lbs.	387,744 lbs.
1933	4,014,752 „	957,600 „
1934	5,450,492 „	1,281,405 „

The conditions of the growth in the different Polish hop districts were rather unequal; in Wolhynia, the plant developed quickly till middle of May 1934 at summerlike weather. From end of May till July, abundant rains and cool weather prevailed, then fine weather set in again till the harvest began; it suffered partly under humidity and lasted from Aug.15, till Sept.10,1934. The insufficient humidity in May influenced badly the quality of the crop and the colour of the hops was impaired through downy mildew.

Poland.

In Congress Poland, the dry heat lasted till middle of June 1934, the plants began already to bloom in May. While at first suffering under drought, they had to put up with too much humidity since middle of July. Red spider caused great damages, later appeared downy mildew that was but little combated. 10 p.c. of the crop were not picked. The emergency picking started already middle of July, general picking lasted from Aug.15 to Sept.20,1934 and was partly disturbed by rains. The crop was mostly of bad colour and of impaired quality.

Galicia enjoyed favourable weather at the beginning; the heavy soils suffered in May and June under drought, red spider and later on humidity and floods caused damages so that the quality left much to be desired.

Great Poland. The Neutomischel district suffered under drought and consequently under the damages of red spider; so that 10 p.c. of the crop remained on the vines.

It has to be stated that the insufficient care, the Polish hops are treated with, confines their use to an increasing extent to high fermenting beers. We may add that their exports go mostly to countries which brew high fermenting beers. Therefore judicious growers and dealers in Poland demand from their Government improvement and refinement of the plants, **official control of the quality for export** and regulation of the acreage based on that one of 1934.

On account of the bad conditions of the crop, prices set in at 150 to 180 Zloty per cwt. Later on prices ranged from 50 to 250 Zloty; the strictly choice qualities, seldom to be found, quoted Zloty 300.— The unsatisfying qualities hampered the marketing. End of June prices ranged from 50—170 Zloty with stocks of 220,400 lbs.

Quality was judged:	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Wolhynia	25	65	10
Congress, Great Poland and Galicia	10	60	30

We figured the Polish acreage 1934 at 6,425 acres that may be considered as minimum. Since then the acreage has been increased considerably and according to news received, the respective enlargements are in Wolhynia 494 acres (total 4447 acres), in Congress Poland 370 acres (total 1853 acres), obtaining thus a **total acreage of 7289 acres** for 1935, including Galicia with 741 acres and Great Poland with round 247 acres. These figures are estimates only; reliable ones are not available.

	Imports to Poland:	Exports from Poland:
1st Sept. 1932—31st Aug. 1933	661 lbs.	3,890,941 lbs.
1st Sept. 1933—31st Aug. 1934	—	3,260,156 „
1st Sept. 1934—31st March 1935	15,868 lbs.	3,205,277 „

Russia. We received news that in order to increase quickly the hop culture in Russia, the Government has taken steps in favour of the farmers; among others they were freed from taxes for the land destined to hop acreage, furthermore the prices will be regulated for hops delivered to the Government and credits of 1200 Rubels per acre will be given for five years for every newly laid out garden and kiln; it is prohibited to root hop gardens without special permit of the agricultural commissioner. In 1937, at the end of the second five-years-plan, the amount of hop acreage in the Soviet Union (RSFSR) shall reach 9850 acres, 6460 acres of which will be situated in the Ukraine. No official figures concerning acreage, crop results and consumption or imports and exports of hops, are obtainable.

England. Despite of cold weather in spring, the hop plants found about normal growth at the beginning of June 1934, and since then the plants prospered very satisfactorily. Aphis flies caused little disturbance. The dry, warm weather in early summer prevented damages of downy mildew but favoured the spread of red spider; some growers have been compelled to wash 9 times. Before picking that began end of August, the appearance of the plants in all English hop growing districts was generally a good one.

Because of the long drought and rain storms in August and September 1934, the harvest was more diverse and poorer in quality than that one of the two previous years. Nearly valueless hops were picked to a larger amount than usual; the unpicked acreage came up to 273 acres against over 1600 acres in 1931 and 3500 acres in 1930.

The varieties of Goldings and Bramblings in East Kent were favoured and also the Goldings in Mid-Kent, the Fuggles in the Weald of Kent, the Bramblings, Mathons and partly the Fuggles in Worcester.

On Aug.24,1934 the **Hop Marketing Board** fixed the total estimated market demand for the crop 1934 at 224,000 cwt which allowed the producers' annual quota at 97 p.c. of their basic quota. The quotas could be equalised till Oct.2,1934; at the same date, the farmers had to deliver their crop to the H.M.B., receiving a first payment of £ 5 per pocket. The total crop amounted to 259,000 cwt. The H.M.B. absorbed in total 245,496 cwt. from the producers, 28,169 cwt. of which as non quota hops had to wait for the sale of 217,327 cwt. quota A hops. On Dec.17,1934, the valuation of the 157,591 pockets was finished by the H.M.B. The quantity of 216,000 cwt. contracted by the brewers, had to be taken over till Jan. 14, 1925. According to the great differences of brewing value, the offers for the 1934 crop ranged from £ 3 to £ 13.10.— per cwt. (Average price £ 9 plus 10 s. for levy fund).

The valuation of hops through the H.M.B. caused troubles because of the difference in opinion as to quality and fixed prices. Careless picking, combined with errors in drying, curing and bagging were complained of to a larger extent than in 1933. Since Jan.8, 1935 the unsold stocks of the English crop were given free for sale to any buyer.

Approximately 2000 cwt. of all faults, i.e. hops rejected on account of being cold packed or insufficiently dried and cured, have been withdrawn from the market and it is understood that their total destruction is contemplated for manurial purposes. After June 1, 1935, prices were raised by 10 s. in order to offset heavy storage charges etc. that are being incurred. The demand since February 1935 is but a small one, as the breweries have covered their total requirements already before that date. The remainders of the 1934 crop amounted end of June to 19,000 pockets or round 30,000 cwt.

The English breweries manifested their dissatisfaction to the H.M.B. about the actual sales conditions and asked for alteration. The main defects are said to be: the crop was available only 6—8 weeks after picking, the time of distribution (3 weeks) for the dealers was too short and the H.M.B. would only favour the wishes of the producers no matter what the effect upon the consumers.

The total estimated brewers' demand as stated in April 1935 for this year's crop allows the quota to be raised by 2 p.c. and the quota for 1935 has been fixed with 100 p.c. or 225,000 cwt, to which further 6000 cwt. contract hops are to be added. Consequently the English acreage may be slightly enlarged.

Quality was judged as follows:

	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
	25	50	25
	English Imports:		English Exports:
1st Sept. 1932—31st Aug. 1933	1,822,267 lbs.		2,705,850 lbs.
1st Sept. 1933—31st Aug. 1934	6,505,436 "		1,736,421 "
1st Sept. 1934—30th April 1935	4,004,337 "		1,805,406 "

Washington: The plants suffered more than usual under vermin and diseases; downy mildew appeared for the first time in Yakima, no effort was made to combat it, but very little damage resulted on account of later hot and dry weather which prevailed before picking (Sept.1 till Oct.1, 1934). The colour of the crop was greener, the quality however much lower than in previous years. Mould and red spider caused damages shortly before picking and also a nightfrost on Sept.24, 1934, so that about 5000 bales in this territory remained unpicked.

U. S. A.

Oregon: In April and May 1934, there was an attack of downy mildew but the following dry heat made it disappear, so that it caused but few damages; only the "early Clusters" were somewhat hurt. Fortunately no lice were noticed. The "mosaic" disease was found for the first time in this district and was combated through grubbing out infected hills. Picking lasted from Aug.10 till Sept.25. Colour, quality and conformation of cones of the 1934 crop were considerably better than in 1933. The yield in some parts of Southern Oregon was particular abundant.

California: Downy mildew appeared in the yards of the Sonoma and Mendocina sections; it was combated in Sonoma with little success, in Mendocina, warm weather cleared it off. Picking lasted from Aug. 20 till Sept. 20, 1934. Colour, quality and conformation of cones in Sonoma and Mendocina sections were much better than in 1933. Crop in Sacramento section was about normal.

Quality was judged as:

	prime:	medium:	inferior:
	p.c.	p.c.	p.c.
Washington	30	40	30
Oregon	70	20	10
California (Sonoma, Mendocina)	60	30	10
California (Sacramento)	25	40	35

Development of prices. End of August 1934, the 1933 hops quoted 18—20c net to growers. The 1934 crop was placed at 40,345,000 lbs. or 201,725 bales of 200 lbs. (Governmental figures) against a production of 199,825 bales in 1933. The stocks on Sept.1,1934 in hops of all growths were given with 43,292 bales as compared with 8,947 bales at the same date the year before.

Under the influence of this rich yield — according to dealers' opinion it amounted to 225,000 bales— and because of the great stocks, opening season prices ranged from 10—20c net to growers with small demand and fell slowly but steadily till middle of December 1934 to 10—13c. Then the demand revived a little and brought slight gains up to 3 c per lb. for better qualities till beginning of February 1935. A further lack of demand caused the prices to decline again in May 1935 to 10—12c per lb. and 8½ to 12c in June 1935.

The heavy offerings and the stocks of altogether 245,000 bales depressed continuously the development of prices. A considerable amount of the crop was delivered by the farmers in fulfilment of contracts that were closed in former years at much higher prices. The large quantities of inferior qualities of the 1934 crop remained without demand. For older growths there was no interest at all. The cost of production is placed at 15 to 20 c per lb., but it may be lower for the smaller farmers who do not depend on labourers. The cost of picking alone amounts to about 4c.

The dealers' prices opened with 27—28c and declined till middle of September 1934 to 16 to 20 c.; after a short improvement by 2c, they reached their lowest point at 14—19c. in May 1935. The sale of imported hops at prices of 90—120c per lb. duty paid, found but a narrow market on account of the great differences in prices in comparison to domestic hops.

The imports of 1934 Central-European hops increased slower than the fast rising beer production in U.S.A. and amounted from September 1934 till March 1935 to 3,973,287 lbs. against 3,314,760 lbs. in the same period of 1933/34. We want to point out that for the brewing of first class "Lagerbeer" the use of imported hops, that originate out of the famous districts of Central Europe, seems to be necessary, at least for the last hopping.

Imports and Exports.

The exports of 1934 American hops amounted to 6,145,109 lbs. from September 1934 till March 1935 and were 1,112,822 lbs. below the previous year. The reason may be the limited use of foreign hops in England, although England and Ireland are still taking 75 p.c. of the U.S.A. hop export.

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U. S. Hop Consumption.

The U.S.A. consumption of hops for brewery purposes in 1933 was 16,115,000 lbs. and, with a beer production of 42,818,549 barrels in 1934, can be estimated with 28,260,000 lbs. on a basis of 2/3 lb. of hops per barrel. For 1935 a beer production of round 50 million barrels is expected, which would correspond to a hop consumption of round 33 million lbs. On account of the continuous improvement of quality of the American beers one can rely upon an increasing popularity and demand.

In April, 1935, 680 breweries were in production against 1324 in 1914. Two States only of the 48 of the Union, namely Kansas and Alabama, remained dry. In 1914, at a consumption of 66,189,000 barrels, 4 States were dry and the population at that time was only 98 millions against an estimate of round 125 millions of today. Basing for the present time the same beer consumption per head as in 1914, a consumption of nearly 85 million barrels seems to be possible.

The financial position of the U.S.A. brewing industry in 1934/35 was unsatisfactory. The beer taxes are too high and the selling prices were often too low (in consequence of keen competition among the breweries). The Banks are rather reserved with credits considering the hard crisis, although it must be remarked that a slow improvement set in within the last months.

Marketing Agreement.

Induced by the low prices for 1934 hops that rarely covered the cost of production, the hop growers of California, Washington and Oregon already in autumn 1934 made proposals concerning a marketing agreement.

The McNary Bill has been approved by the U.S. Senate and placed hops on the list of basic commodities, for the administration of which the Department of Agriculture is entitled to take special measures. It is also intended to impose a processing tax of 2 c per lb. to buy up and destroy all surplus stocks. This Bill requires still the approval of the U.S. Congress.

By end of April 1935, the Marketing Agreement proposed by the 3 Pacific States was given a tentative approval by the Secretary of Agriculture; as soon as 60 p.c. of the growers give their consent, the Agreement will come into effect.

The highlights of this agreement are: The Industry Board consists of 15 members — 7 growers, 3 dealers, 4 brewers and 1 neutral member. The Advisory Committee consists of 12 members of each state (California, Washington, Oregon) and has to assist the industry board in making crop estimates. The board has to determine: the total quantity that could be marketed during the next year; towards April 1 of each year it would make an estimate of each grower's total estimated production of new hops under consideration of acreage, previous productive capacity, age of plantation etc. Growers have the right to apply for another estimate short before the picking. Adding all individual estimates, taking into consideration unsold hops and desirable carry-over, the board would arrive at the total available tonnage of hops. From the available tonnage and the tonnage advisable to market, one would arrive at the ratio on which each grower's maximum marketable percentage is based. All decisions as to allocation of the grower's salable tonnage is made by the grower members of the industry board. The agreement provides certificates to growers for the saleable tonnage of their hops. No sale is possible without certificate. However growers can transfer certificates to other growers through the board. The board may establish several standards for new hops and may set a minimum price on a medium grade of hops, or prices to growers may be set for all grades by a majority vote of the board. Contracts made before Jan. 16, 1935 are not affected by the agreement.

The agreement does not include regulation of acreage, so that with remunerative prices growers will be induced to increase their acreage. — The growers of the State of New York that yielded on 70 acres 230 bales in 1934 at prices of 40—42c per lbs., abstained from joining the agreement. The decision of the Supreme Court against the validity of the N.R.A. Codes has caused uncertainty about the approval of the Marketing Agreement. The vote of the growers has not yet been finished.

Changes in Acreage.

In the 3 Pacific States (California, Washington, Oregon) in total a material increase of about 18 p.c. in acreage took place in spring 1934 against that one of 1933. In California, the set out was 1100 acres, in Washington 1400 acres, and in Oregon 3000 acres that will give full yield for the first time at the 1935 crop. — The acreage of 1935 may have been somewhat reduced in comparison to that one of previous year. It is considered that about 5000 acres will only be partly cultivated, as the Banks do not provide the big farmers with the necessary funds for preparing the growing crop on account of the so far unproductive prices.

On May 1, 1935, 86,428 bales of all growths were in hands of the farmers, 45,752 of which were 1934 hops in comparison to a total of 56,839 bales on May 1, 1934 with 46,869 bales 1933 crop. On account of a normal yield, the 1935 crop is placed at over 200,000 bales. Should the expectations of a beer consumption of 50 million barrels in 1935 come true, a brewery demand of round 160,000 bales will have to be covered to which a further domestic use of 25,000 to 30,000 bales for malt syrup, fabrication of yeast etc. has to be added. It results that the stocks of 1933 and 1934 hops will practically not be necessary.

	U.S.A. Imports:	U.S.A. Exports:
1932	1,299,698 lbs.	3,006,476 lbs.
1933	5,957,302 "	6,708,865 "
1934	6,119,295 "	6,001,492 "

New-Zealand.

In New-Zealand, the period of growth 1934/35 was extraordinarily dry. Picking lasted from Febr. 18 till March 23, 1935. The quality of the product (90 p.c. prima, 5 p.c. medium and 5 p.c. inferior) exceeded considerably that one of the last three years. The average yield amounted to 1,810 lbs. per

acre. For a crop of 1,322,500 lbs. the prices quoted were from 112—196 s. per cwt. and the hops had a good foreign and domestic demand. In 1932/33, 357,504 lbs. and in 1933/34, 411,264 lbs. were exported.

World's Hop Consumption 1934/35.

	Beer-Production 1934 American barrels	Dose of hops per barrels in lbs.	Hop Consumption in 1000 lbs.
Austria and Hungary	2,203,530	0,67	1,476
Balkan	123,554	0,64	79
Baltic States	454,169	0,71	322
Belgium and Luxembourg	12,119,418	0,58	7,029
Czechoslovakia	6,808,279	0,77	5,242
Danzig	69,020	0,77	53
Denmark	1,841,388	0,42	773
France	14,266,710	0,48	6,848
Germany	31,389,660	0,60	18,834
Netherlands	1,289,227	0,55	709
Norway	341,692	0,55	188
Poland	939,014	0,77	723
Roumania, Jugoslavia	556,421	0,77	428
Russia	3,152,770	0,64	2,018
Saar-Territory	635,667	0,60	381
Spain, Portugal, Italy	1,002,070	0,64	641
Sweden	2,069,750	0,42	869
Switzerland	2,100,426	0,51	1,071
Continent	81,362,765	—	47,684
Great Britain	21,633,115	1,29	27,907
Irish Free State	2,491,540	1,94	4,833
Europe	105,487,420	—	80,424
Africa	412,416	0,90	371
Australia and New Zealand	2,376,507	1,16	2,757
Canada	1,454,535	0,97	1,411
Central America	892,148	0,64	571
Eastern Asia	1,607,913	0,64	1,029
India	58,795	1,16	68
South America	2,952,526	0,77	2,273
United States of America	42,816,321	0,66	28,260
World's consumption	158,058,581	—	117,164

Contracts in Europe in 1935 have been closed to an insignificant extent. In Belgium, prices varied from bfr. 750 in April 1935 to bfr. 600/620 in June for deliveries in October/November 1935. — In France, contracts have been reported in early spring with ffr. 500 and in June with ffr. 425, in Jugoslavia, in May with 1200 Dinars and in Poland, in June with US \$ 35, each price to be understood per 50 kilos (110 lbs.).

Contracts.

In U.S.A. contracts have seldom taken place since 1934. The fundamental difference between contracts in U.S. hops and those in European hops is generally ignored. Many farmers in U.S.A. are induced through the extent of their acreage to contract part of their crop in order to procure the necessary funds for the culture of their product. In Europe however there are no big growers like in U.S.A.; the hop culture is nearly exclusively in hands of small and smallest farmers; we estimate that in whole of Central Europe there are hardly 20 growers who harvest 50,000 lbs. = 250 bales.

It resulted into a necessity for the Governments of the hop cultivating countries in Central Europe — with the exception of France and Belgium where a similar bill has been proposed — to protect the farmers against contracts that proved in the course of years to be disastrous to the badly informed small hop producers. The laws stipulated that the farmer or seller can recede from the contract at any time; in Germany contracts are prohibited. — As there is but little security for the dealer of safe delivery by Central European hop growers, the offer of such a contract signifies from the European point of view nothing else but gambling. Reliable firms desist from offering contracts, thus pointing out that they are dealers and not speculators.

The winter 1934/35 lasted long, the spring was wet and cold. In April, many plants failed to appear and also a good many were weak in consequence of the great drought of last year. The plants uncovered late remained retarded in growth and were also hindered by fleas.

Growth of the
1935 Crop.

In Germany, April was cold and mostly wet; till middle of May, there was still snow and frost before it became warmer. During the hot days in June, the growth of the plants advanced quickly and towards end of June, in the Hallertau and Spalt districts top wire or at least 3/4 of full hight was reached.

The plants looked healthy and vigorous, with many side shoots. Under these circumstances, the prospects for the new crop are good. Downy mildew was fortunately less to be seen than in previous years, nevertheless, farmers have been spraying up to 3 times as a preventative matter. The hops set in 1935 suffered much in the Hersbruck and Aisch districts, fleas and downy mildew retarded the growth.

Wurtemberg, Baden, Tettwang: the appearance of the plants is generally a good one; fleas, downy mildew and lice were checked in time by fine, hot weather.

In Czechoslovakia, in the Saaz and Auscha district, the plants set out in 1934 had wintered badly. Works in the open fields began very retardedly because of the continuous wet and cold weather. After middle of May warm weather set in and the plants could make up part of their backward growth. Fleas caused little harm. Towards end of June, the plants reached top wire in the early sites; the general appearance was good and free from vermin and diseases. The latest news from Saaz report urgent want of rain as the precipitation was only 189 mm from January till end of June 1935 against a little less in the very dry year 1934.

Jugoslavia. Uncovering of the plants started on April 10; the hop roots had wintered well, the plants developed but slowly. Beginning of May, there were still some nightfrosts. In Slovenia, in about 50 p.c. of the gardens, farmers sprayed against downy mildew. Middle of June, there was much difference in growth, but the plants were healthy, free from vermin and generally of strong appearance. End of June, the early hops began to bloom. In the Backa, after abundant rains in June, warm weather set in, the plants grew rapidly and reached full height already end of June. The growth was healthy and vigorous.

From Poland, strong and healthy growth is reported, although the general appearance is unequal.

In Alsace, the growth is retarded, downy mildew and lice are in existence. — In Belgium, aphid is reported. In England, cold spring and frost till middle of May (temperatures of 8-14° Fahrenheit) impeded normal growth. June brought favourable development, but a strong attack of flies. The appearance of downy mildew has to be reported at once to the Ministry of Agriculture. — From U.S.A. reached news about normal growth in the plantations; downy mildew appeared in several districts, but was checked later on through dry and favourable weather.

Joh. Barth & Sohn.

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

1 American barrel = 31 gallons = 117,35 liter; 1 English barrel = 163,57 liter or 1,383 American barrels.
 1 American gallon = 4 quarts = 8 pints = 160 ounces = 1,280 drams = 76,200 minims
 1 liter = 1,77 pints = 35 ounces = 283 drams = 17,000 minims.
 1 cwt. = 112 lbs., 1 Zentner = 110,2 lbs., 1 cwt. = 1.016 Zentner, 1 lb. = 0,453 kilos.
 1 bushel malt = 34 American lbs.; 1 bushel barley = 48 American lbs.

NEW YORK EXCHANGE on July 15th, 1935:

1 US \$ = Reichsmark (RM.) 2.48	1 £ = US \$ 5.—	1 US \$ = French Francs (ffr.) 15.7
1 RM. = US \$ 0.40	1 US \$ = Czechosl. Crowns (Kc.) 23.9	1 US \$ = Belgian Francs (bfr.) 29.5
1 US \$ = Pound Sterling (£) —.4.—	1 US \$ = Jugosl. Dinars 43.5	1 US \$ = Polish Zloties (Zl.) 5.25