

Home Office: Nuremberg, Germany Branch Houses at Saaz, Strasbourg and New York Hop Farm "Barthhof" in Hallertau (Bavaria) **New York**, July 14th, 1936. 120, Wall Street

Hop Report for 1935/36.

The international exchange of goods has been handicapped during the last years and unfortunately a change for the better has not taken place so far. Goods produced in one country in abundance, are still being destroyed there whereas other countries with a shortage of them have no possibility of purchasing as they are unable to pay in the desired currency or by means of supply of other goods.

The international trade restrictions have led to a state of economical war between many countries. The stability of the still existing gold currencies is again exposed to doubts and their fluctuations disturb the world markets.

Whilst the volume of the world's trade attains about 76 p. c. of 1929, its value in the first quarter of 1936 amounts only to 34.1 p. c. In the course of the last months its rising tendency has continued to become more pronounced as compared with the first years of the recovery.

In all those countries where in the preceding year a retrograde movement of the beer production was noticeable, a further decline could also be observed in 1935, with the exception of Jugoslavia where a slight increase has been stated. The decline concerns the following countries, viz. Algier, Austria, Belgium, Bulgaria, Czechoslovakia, France, Holland, Italy, Lithuania and Venezuela to which are added Argentine, Free State of Danzig, Poland, San Salvador, and Switzerland

On the other hand more countries than in the past year have been able to raise their beer production. These countries and their respective percentage of increase are: Bolivia (45 p. c.), Brazil (28 p. c.), Chile (30 p. c.), Columbia (7 p. c.), Cuba (30 p. c.), Denmark (2 p. c.), Ecuador (25 p. c.), Finland (7 p. c.), Greece (13 p. c.), Great Britain (5 p. c.), Guatemala (37 p. c.), Japan (8 p. c.), Ireland (6 p. c.), Livonia (5 p. c.), Luxemburg (3 p. c.), Mexico (21 p. c.), New Zealand (20 p. c.), Panama (47 p. c.), Peru (18 p. c.), Union of South Africa (14 p. c.), Sweden (4 p. c)., Spain (8 p. c.), Hungary (18 p. c.). The majority of the countries not mentioned here have been able to slightly better their production. The largest increase (5.6 p. c.) is noticed in U. S. A. with a production of 45,228,605 barrels in 1935 as compared with 42,816,000 barrels in 1934; the tendency of this considerable increase also continues in 1936.

Unemployment in Germany decreased from 6.05 millions in February 1933 to 2.02 millions at the end of May 1935 and to 1.49 millions at the end of May 1936 and has led to higher consumption of beer; this increase during the financial year 1935/36 amounts to 7.9 p. c., making a total consumption of 39,753,695 hectoliters or 33,876,178 barrels.

The world's beer production for 1935 is given with about 162.9 million barrels as compared with 158.1 million barrels in 1934.

The following table shows the beer production for 1935 as per calendar year or financial year respectively.

Beer Production.

World's Beer Production.

World's Beer Production in 1935

in 1000 American Barrels.

* official figures.

The winter 1934/35 was mild and brought little snow, but there was sufficient humidity in the soil. In April and May 1935 wet and cold weather prevailed. Even in May there were very cold days with night-frost, and the last snow in Germany fell on May 17th. The works to be carried out in spring, viz. uncovering, cutting and planting of new plants, was hindered therefore and delayed until end of April.

Fleas appeared abundantly only in Wurttemberg. Up to the 20th of May the plants developed only slowly; from then onwards until the middle of June beautiful weather with little rain followed so that the development progressed quickly. At this time downy mildew, lice, grubworms and hop-bugs could be noticed, but no lasting damage has been done in any German district because of the very careful measures taken against diseases and insects. Cultivation of the soil and manuring only rarely left anything to be desired.

A long-lasting dryness began on the 20th of June and with short interruptions continued until the beginning of August. On the 2nd of July numerous yards between Pfaffenhofen and Nandlstadt suffered from strong hail-storms and also in the Tettnang district damage was done by hail. Red spider was noticed and combated in some places of the Spalt district as well as in some parts of the southern Hersbrucker Gebirge.

The plants reached full height about middle of July. The lateral branches had developed profusely everywhere, only much shorter than in normal years, but with copious and even extraordinary strong onset of blossoms. In the Hallertau district blooming began about the 10th of July, but developed only slowly on account of drought.

The rain fallen during the first half of August was urgently required for the development of the cones, yet in the greater part of hop growing districts of Central Europe the growth of the cones remained behind that of former years. The small size of the cones was characteristic for the 1935 crop which suffered under dry weather during the principal time of development. This small conformation of the cones also accounted for the first estimations of the crop being too low, all the more so as a great part of the first hops picked was not ripe. It became manifest only later on that the weight of the small cones was heavier than expected owing to an unusual richness in lupulin.

In the eastern Hallertau fell but little rain. The precipitation between January and August 20th, 1935 at our hop-farm Barthhof situated between Au and Wolnzach, amounted to 557.5 mm (1934: 337 mm and yearly average 460 mm) and the total amount of rain fallen in April and May was 230 mm.

Shortly before picking the second generation of the **hop-flea** appeared; the cones stung by the insect discoloured and mostly fell off. More disagreeable was the reappearance of lice and flies which were present during the whole time of picking so that the hops picked at last, i. e. the late sorts, were mostly damaged by blight.

Growth of the 1935 Hop Plants in Germany. The productive German acreage which amounted to 20,289 acres in 1934 and to 22,315 acres in 1935 has been increased by 2,334 acres in 1935 in view of the higher German beer consumption. The acreage for 1936 therefore totals 24,649 acres. A further increase in 1936 has not taken place.

The endeavours to clear the figures of the German hop acreage have not yet been terminated. However, the data given in the schedule below are exacter than any details disclosed by former figures.

Producing countries	A	creage	in acr	es	Y		oer acr ounds	·e	 Ou		e of the y pounds	
	1932	1933	1934	1935	1932	1933	1934	1935	1932	1933	1934	1935
Hallertau	10,428	12,664	11,283	12,464	796	1,265	673	1,347	8,309	1 3,2 51	7,625	15,208
Spalt .	2,908	3,272	2,4 81	2,702		400	687	700	1,598	1,173	1,710	1,741
Hersbruck	2,110	2,617	2,441	2,757		441	812	642	771	936	1,991	1.,577
Aischground	301	402	, 324	367	182	107	392	357	55	3 0	127	116
Jura	153	193	153	193		356	531	1,026	44	54	82	158
Rheinpfalz .	\ \		133	142	,		865	1,449	,		115	194
Other districts wilhout seal .	694	694	2 45	24 5	361	455	861	718	253	316	211	176
Bavaria	16,594	19,842				950	691		11,030	15,760	11,861	19,170
	10,001		,	20,010				_,	,000	20,000	14,001	,
Tettnang	2,547	3,064	1,357			821	986	1,521	}1,631	2,088	1,338	2,067
Wurttemberg-Underland	} 2,041	0,004	1,225	1,292	} 000	021	959	1,084	}1,031	000ر2	1,175	1,333
Baden	622	694	620	574	532	723	642	785	331	452	400	452
Prussia etc	34	37	27	36	647	955	936	1,173	22	30	26	32
Germany	19,797	23,637	20,289	22,316	657	923	727	1,133	13,014	18,330	14,800	23,054
Saaz	18,149	19,303	20,638	21,132	686	499	566	517	1 2, 397	9,092	10,987	10,689
Auscha	3,044	3,044	3,450	3,469		865	830	954	2,579	2,645	2,535	3,306
Raudnitz	1,863	2,172	2,382	2,123	615	816	566	776	1,146	1,521	1,234	1,653
Dauba	308	2 55	356	469	896	865	1,048	1,084	276	220	330	386
Moravia etc.	546	591	670	717	606	561	410	1,066	331	308	242	716
Czechoslovakia	23,910	25,365	27,496	27,910	695	571	602	611	16,729	13,786	15,328	16,750
Alsace	3,410	3,323	3,546	3,516	387	753	1,378	1,075	1,322	2,479	4,694	3,780
Burgundy and Lorraine	771	813	840	808	415	672	945	843	320	540	771	683
Northern France	395	447	556		1,423	1,614		1,284	562	639	705	716
France				4,942				└───				
Poland	4,576	4,583	4,942 7,037	-	481 654		1,342	1,048	2,204	3,658	6,170	5,179
Wojwodina	5,387	5,436	-	7,660		606 606	771 803	673	3,526	3,306	4,188	4,739
Slovenia	1,482 2,965	2,100 2,842	3,645 3,707	4,448 4,201	687	918	647	981 1,275	1,212	904	2,336 2,380	3,582
						a			1,873	2,623		4,739
Jugoslavia	4,447	4,942	7,352	8,649	688	789	954	1,128	3,085	3,527	4,716	8,321
Russia	2,965	2,471	2,471	2,471	557	579	579	580	1,653	1,433	1,433	1,433
Belgium	1,210	1,408	1,777	2,068	956 000	1,458	1,962	1,579	827	1,818	2,457	2,810
Various countries	370	370	741	741	600	600	600	600	220	220	440	441
Continent	62,662	68,212	72,105	76,757		731	722	870	41,258	46,078	49,532	62,727
England	16,531		18,038				1,716		21,056	24,244	28,983	27,770
Europe	79,193	85,106	90,143	95,008	784	887	919	1,003	62,314	70,322	78,515	90,497
United States			00.000	00.00	4 4 0 -	4 0 50				10		
of America	22,000						1,480	1,048	24,120	40,002	39,121	38,680
Canada	990	1,082	1,156	1,123	855	1,494	1,288	1,572	791	1,477	1,399	1,766
Australia and	1.0.0	1 0 4 0	1 850	4.050	0.400	1 000	1 04:0	1 0 - 2		0.045		0.115
New Zealand		. 1,643			2,162				2,314	2,645	2,975	3,416
World's production	103,826	118,125	129,849	137,181	891	1,106	1,030	1,030	89,539	114,446	122,010	134,359

Hop Acreage and Production.

World's Hop

Acreage.

German Hop Acreage.

German Crop.

In the German hop growing regions the picking, apart from the early hops, began in the last days of August. The gathering of the crop was considerably hindered by rain. Picking in the yards had to be interrupted frequently and, like the drying, caused much trouble to everybody. The harvest, especially in the Hallertau district, suffered from want of pickers. The quality of the 1935 Hallertau Hops will have satisfied even the most pretentious consumer, leaving aside the small form of the cones and the less careful picking rendering necessary often a further one although this second treatment should better be dispensed with in future.

In the Spalt district the crop was started too early, already end of August, for fear the lately fallen rain might still cause a discolouring. There were many yards where no spraying at all has been done. The district of Spalt Stadt had the disadvantage of drought. The external regions had a better yield than in 1934. The product of Spalt had small cones, but was rich in lupulin.

Early hops of Tettnang have received sufficient rain during the growth so that the cones were of normal size. The picking of the early hops began on August 10th. Quality and colour of the early hops which are preferred everywhere, came up to all expectations with the exception of the hops picked at the end of the crop, for neither their quality nor their colour and picking could give satisfaction.

The Hersbrucker Gebirge, the Aischground and the Jura district had likewise to suffer for some time for want of rain during the growth. The rain fallen a few weeks before picking brought about some change for the better, but could not balance matters.

The southern part of the Wurttemberg-Underland (Rottenburg-Herrenberg-Weilderstadt) was favoured with rain; colour and quality were good. The production of Baden is to be praised on account of its particularly careful cultivation. However, these hops have been picked too short generally and were subject to brittling.

Quality was judged:	prime	medium	inferior
	р. с.	p. c.	р. с.
Hallertau	. 30	55	15
Spalt		55	10
Hersbrucker Gebirge	. 20	60	20
Tettnang	. 40	40	20
Wurttemberg Underland	. 30	50	20
Baden	. 20	75	5

	German Hop Imports:	German Hop Exports:
Oct. 1st 1933 to Sept. 30th 1934	3,801,018 lbs.	8,233,703 lbs.
Oct. 1st 1934 to Sept. 30th 1935	5,974,603 "	6,177,371 "
Oct. 1st 1935 to May 1st 1936	5,665,602 "	6,307,187 "

On August 1st 1935, the duties of the Hop Market Regulation went over to the Association of the German Brewing Industry (H.V.d.B. = Haupt-Vereinigung der deutschen Brauwirtschaft). By a decree issued on the 24th of August the H.V.d.B. laid down the directions for the regulation of the sale of the 1935 crop and these directions were more or less adapted to those of the Reichsnährstand (Official Board of Alimentation) of the past year.

Producers' prices for the 1935 crop were fixed on August 31st by H.V.d.B. for the districts of Spalt, Tettnang, Hallertau, Jura and Baden at RM. 200—300, and for the remaining German districts at RM. 170—300 per 50 kilos. Purchasing began on September 6th. A lively demand set in immediately everywhere, especially in the **Spalt district.** This crop was taken up within a few days at prices between RM. 250.— and RM. 300.—. The district of Spalt being cleared, heavy purchasing started in the **Tettnang district.** Prices began at RM. 270—290 and reached the maximum of RM. 300.

In the Hallertau district buying began at prices of RM. 230-260 up to a top price of RM. 290 in preferred regions, and RM. 200-240 in external regions. At the beginning of October the advancing of the qualities made fast progress and therefore purchasing became more quiet with prices between RM. 210 and RM. 240. During the second half of October the demand continued to diminish and prices gave way to RM. 200-230.

In the Wurttemberg Underland RM. 180–200 were paid, at the end of October RM. 170–180 only. In Baden prices opened at RM. 240–255 and later gave way to RM. 200–240.

In the Hersbrucker Gebirge prices began at RM. 170-200 and at the end of October declined to RM. 170-190. In the Jura district RM. 250-300 were paid according to the region.

On November 30th 1935, the unsold quantities in growers' hands in the various German districts amounted to about 3,900,000 lbs. which were gradually taken over by the German Hop Traffic Company (D.H.V.G. = Deutsche Hopfen-Verkehrs-Gesellschaft). These hops were placed at the disposal of the trade who offered them to the German breweries at fixed prices ranging between RM. 215–265 according to quality and origin.

The successful endeavours of German hop growers to increase the yield per acre and to produce choicest quality at the same time are a proof against the heretofore existing wishes of the German brewing industry and of the trade for increasing the German acreage in order to secure home requirements and export. This fact will also be of interest for the other hop-growing countries, for it proves that the certainty of remunerative prices will enable the producers to extraordinary accomplishments. It is not exaggerated to say that German Hop growing renowned since long already for its effective management, surpasses to-day in many regards the state of most hop growing countries.

Prices for the German 1935 Crop.

Sale of Surplus Stocks.

Success in Hop-Growing. Retrospecting the 1935 crop of Central Europe, we come to the following conclusions:

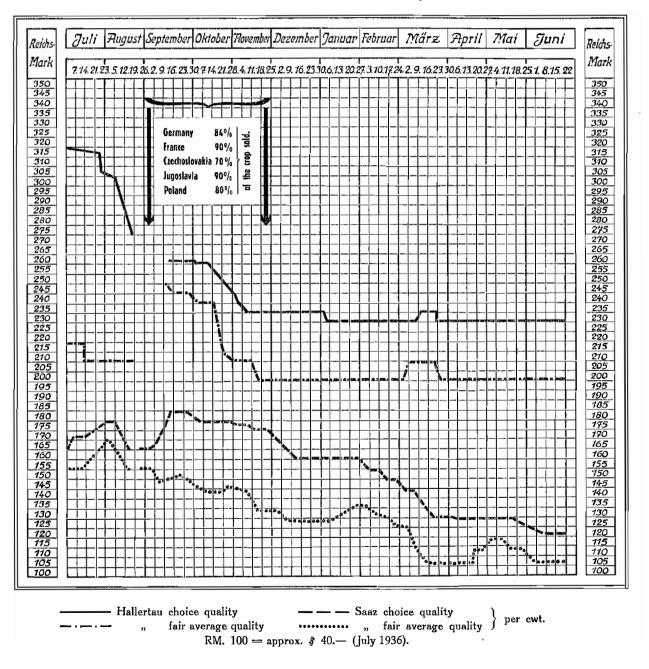
Facts about the 1935 Crop in Central Europe

1) The drought during the important months of development June, July and August, delayed the development. The cones were everywhere smaller than usual, but very rich in lupulin and therefore of heavy weight.

2) The percentage of bitter principle was beyond normal so that the dose of hops could be reduced in many cases.

3) Discolorations of the crop through downy mildew were noticed in Belgium and Poland.

The richness in lupulin of the German Hops and the high percentage of the bitter principle nearly reaching that of 1932 rendered it possible to reduce the dose of hops to an average of about 224 grams per hectoliter as compared with former 235 grams per hectoliter.



Movement of Prices 1935/36.

The analysis of the 1935 hops as to their content of bitter principle (Lintner-Adler) made by the Wissenschaftliche Station (Station of Scientific Research) in Munich and the Staatliche Brautechnische Versuchsstation (Governmental Station of Brew-Technical Experiments) at Weihenstephan, has given the following results to which those of 1931/1934 have been added:

Bitter Principle of the 1935 Crop.

	•	1931	1932	1933	1934	1935
Bitter Principle.	Origin	Bitter principle without water				
		p. c.	р. с.	p. c.	p. c.	p. c.
	Hallertau , , , , , ,	1 4,2—19,7	15,9—18,9	14 ,2 —16,9	11,9—15,6	15,6—18,6
	Spalt	15,6—19,6	15,3—19,5	13,0-16,1	13,0—16,0	15,1—17,4
	Aischground	15,0	15,0 —16,3	-	_	—
	Hersbrucker Gebirge	15,316,4	15,3—18, 2	11,5—16,8	12,1—15,6	14,4-18,0
	Wurttemberg	15,9—18,7	15,4—20,5	13,4—17,7	14,0—16,4	14,1—18,5
	Baden	14,5—18,2	·	15,616,2	12,3—12,8	13,3—17,1
	Auscha	12,5—15,8	13,1—16,7	13,7 15,8	11,5-12,5	14,1—16,3
	Saaz	13,7—16,7	14,2—16,8	12,7—14,1	12,2—15,4	13,5—16,8
	Alsace-Lorraine	—	16, 5	12,9	13,4—14,4	16,1
	Styria	12,4—13,5	13,5—15,3	12,1—13,2	14,1	14,416,8
	Backa	12,6-14,0	14,5-16,7	15,7—16,4	14,9	14,8—17,6
	Poland	13,0—14,5	13,2—15,5	12,4—13,7	11,3—12,7	15,1—15,4

Czechoslovakia.

A winter with little rain was followed by a spring with low temperature and cold of a few degrees even in May. The **period of vegetation** in 1935 like in the two preceding years, was remarkable for long lasting **dryness**. The amount of precipitation in June and July amounted only to a total of 38 mm with sometimes tropical heat so that during this drought the plants only slowly developed. The lateral branches were shorter than usual; plants growing abundantly were missing everywhere. In the lower parts of the Eger and of the brooks artificial irrigation was effected with good success.

Attacks of insects were of little importance. Hop-fleas appearing at the beginning of the vegetation were combated whenever necessary. Red spider was seen sporadically in a few yards.

Also in August there fell but little rain. Blossoms developed in a satisfactory manner only in the lower situated yards whilst in the higher situated ones and in those upon open fields the development was less satisfactory. The total amount of precipitation from January to August 1935 in Saaz was 194.6 mm (1934: 292.6 mm, 1933: 222.2 mm). Although the cones riped very well, the majority of them remained smaller than in the past year. Picking was delayed as far as possible in the hope that the situation might still improve by rain. However, this hope did not become true.

The crop began a little later than in the preceding year, partially on the 23rd of August, and finished in the first days of September. It was generally favoured by sunny, dry weather. In view of the small cones the **picking** was more difficult and therefore worse than usual. The colour of the product was green, the quality heavier than in the past year; fully-grown hops of prime quality were scarcer than usual. For one hundredweight of dry hop one required 74 to 80 quarters equal to 25 liters of green hop, as compared with 90 to 95 quarters in the preceding year. The crop of lower situated regions, such as the lower part of the Eger valley and the region of the Bohemian forest was favoured. Hop-fleas and lice appeared in a few yards during the harvest and caused discolourings.

The acreage of Saaz in 1935 amounted to 21,132 acres of 38 to 39 "schock" each (1 "schock"-60 plants) totalling 812,440 "schock" which means an increase of 494 acres as compared with 1934. The number of hop-growers in Saaz amounts to 10,013. Several thousand "schock" of plants have been grown illegally and harvested. These plants were rooted out and the respective producers were fined Kc. 50 to 80 per "schock", in accordance with the size of the illegal acreage. An increase of the acreage for 1936 does not come into consideration, as the tendency is against it. On the contrary, further compulsary regulations are desired, especially as regards the development of prices.

The remaining stock out of a quantity of 60,000 cwt. of hops of the 1930 crop and taken over by the "Hopfensyndikat-G. M. B. H." was placed at the disposal of the agriculture for manuring purposes; the syndicate itself was dissolved. Assets amount to Kc. 6,407 and liabilities to Kc. 26,500,000.

Auscha: The vegetation was delayed at the beginning, but this delay was made good by heat during the summer months. The dryness was effectively interrupted by a few, but copious thunderstorms in July which were very useful for the crop. Thus the plant remained fresh during the mostly dry time of maturing. Picking took place from August 20th to September 15th and was influenced by rain towards the end. The product was richer in lupulin than in other years. The hops were 15 to 20 p.c. heavier than in 1934. Those of higher situated sites showed a smaller growth than usual. The acreage of Auscha has been increased by 19 acres to 3469 acres of 33 to 34 "schock" each equal to a total of 117,936 "schock".

The region of Raudnitz also suffered from drought; the product was richer in lupulin and heavier than in the preceding years and the colour was good. Only a small number of yards had to suffer from hail. The acreage is given to comprise 2123 acres of 30-32 "schock" each

(in former years of 28 "schock" each); the lower figure should only be due to the changed calculation on basis of "schock" whilst as a matter of fact the acreage has not been decreased.

In the district								-		•		as	th	e		-	ng year. inferior
Quality wa	as	յս	lag	geo	1 8	as	TO	IIC)W	s:					prime	medium	interior
Saaz Auscha . Raudnitz . Dauba	• •	:	•	•		•	•	•	•	•	•	•	•	•	25 25	p. c. 70 60 60 50	p. c. 10 15 15 35

In Saaz the last prices paid in August for hops of the 1934 crop amounted to Kc. 1200-1300 whilst on the 23rd of August prices set in with Kc. 1600 for hops of the new crop. Prices ranged at first from Kc. 1500-1650 and, when purchases became more lively about middle of September, from Kc. 1450-1800. At the beginning of October producers were said to have sold 50 p. c. of the crop; about middle of October prices ranged from Kc. 1400-1750. As a consequence of continuously large purchases producers' stocks at the beginning of November were reduced to about 2,750,000 lbs. At this time prices were Kc. 1400-1725. In the course of November they fell to Kc. 1300-1700 and during the first half of December to Kc. 1250-1600. End of December some 1,870,000 lbs. only were left in producers' hands. In January 1936 quotations on an average were between Kc. 1300-1500 and fell slowly but steadily to Kc. 900-1100 until July 1936.

In Auscha prices set in with Kc. 1200. About middle of September prices ranged between Kc. 1100—1300 and soon reached their highest point of Kc. 1350. End of September already 50 p. c. of the crop were considered as sold by producers. A fall in prices now set in, only interrupted in the second half of October. By the end of November prices were reduced to Kc. 900—1125. Whilst in December prices gave further way, they rose at the turn of the year as a consequence of increased demand and remained on their level for some time, but fell to Kc. 700—900 from middle of February to end of March. At present, prices are ranging between Kc. 600—700 for the remainders of the crop.

The prices of Raudnitz Hops during the first months after the crop were about Kc. 25-75 below Auscha quotations, but later on adapted themselves to the latter.

Prices for Dauba Hops set in with Kc. 1000.—; they amounted to Kc. 750—850 about middle of October and in December they ranged mostly between Kc. 500—600.—.

At the end of December 1935 producers' stocks amounted to about 1,870,000 lbs. in Saaz, 330,000 lbs. in Auscha, 165,000 lbs. in Raudnitz and 55,000 lbs. in Dauba.

The number of hop-growers in 1934 amounted to 16107 in the whole of Bohemia, to 432 in Moravia and to 21 in Slovakia.

It is customary in Czechoslovakia not to state the acreage in acres, but according to the number of plants, i. e. on basis of "schock" (1 "schock" = 60 plants). As in the various districts one acre does not count the same number of plants -for instance in Saaz one acre is taken to comprise on an average 38 "schock", in Auscha 34 "schock", in Raudnitz up to the present 28 "schock", but now 30-32 "schock" in Dauba 32 "schock"- therefore mistakes and want of clearness are unavoidable.

						Czecl	hoslovakian Imports:	Czechoslovakian Exports:
Sept.	1st	1933	to	August	31st	1934		10,296,316 lbs.
,,	1st	1934	"	"	31st	1935		11,899,065 lbs.
,,	1st	1935	,,	May	31s t	1936	•	11,065,182 lbs.

Slovenia: The weather this year was more favourable for the vegetation of the plant than in the past year. The uncovering of the plants was started at the end of March already. There were hopfleas in nearly all plantations. The temperature rose towards end of May and warm days continued with short interruptions reaching the highest temperature of the summer with 97° F as early as end of June. The plants soon made good for their former retarded growth. As a consequence of hot weather, red spider appeared; its quick spreading could be overcome at the end of the month thanks to abundant rain.

In accordance with the experience made in the past year spraying against downy mildew was started early and was accompanied by success. It is noteworthy in this connection that about half of the yards was not sprayed at all or only insufficiently. The colour of hops not properly attended to has suffered. Lice were successfully combated. General picking commenced middle of August lasting about 10 days and being favoured by dry weather with a short interruption. Colour and quality of the product were considerably superior to those of 1934, and the conformation of the cones was also a more uniform one. The acreage compared with 1934 was increased by nearly 500 acres. Producers' stocks at the end of October 1935 amounted to only about 330,000 lbs. and to 220,000 lbs. approximately at the beginning of 1936.

The price which at first was 1200 Dinars per cwt., soon rose to 1250 Dinars and reached its highest point with 1650 Dinars at the end of October; inferior quality was quoted at 850 Dinars.

Jugoslavia.

Prices then slowly gave way and at the beginning of 1936 ranged between 600 and 1500 Dinars in order to be still further reduced after the sale of the prime qualities. At the end of April 1936 the valley of Sann could be considered as cleared of hops.

Wojwodina: Insufficient humidity prevailed during the time of vegetation. During the very hot second half of June there appeared field-ants in some yards. These animals bit and sucked out a low percentage of the vines about 4 inches above the ground probably for want of sufficient humidity of the soil. The respective plants then faded off. The harvest during the time of August 19th to September 3rd was favoured by dry weather with the exception of a few days. The colour of the **crop** was better than in 1934, the quality somewhat lighter. The conformation of the cones was small, but the latter were rich in lupulin. Filling the hops into bags was frequently connected with difficulties in view of the great dryness, and the brittling of large quantities was unavoidable. The increase of the acreage from 3645 acres in 1934 to 4448 acres in 1935 amounts to more than 22 p.c. The capacity of the hop-kilns was not sufficient and therefore in some cases the hops suffered from precipitated and premature treatment; they were overdried, brittled or discoloured in large quantities.

At the end of October producers' stocks amounted to about 551,000 lbs. of medium quality and to approximately 165,000 lbs. at the beginning of the year.

The opening price of 900 Dinars per cwt. went down to 650 Dinars about the middle of September whilst inferior qualities cost 400 Dinars. In the second half of September prices for prime quality rose to 1100 Dinars. In the first half of October prime qualities were sold out. In December best available quality was estimated at 1000 Dinars, medium at 800 Dinars, and inferior at 500 Dinars.

Quality was judged as follows:	prime	medium	inferior
	p. c.	p. c.	p. c.
Slovenia	35	45	20
Wojwodina	30	40	30

Jugoslavia is dependent upon exportation with about 95 p.c. of her hop production. In the course of the summer 1935 representatives of the Jugoslavian hop growers assembled in order to discuss a reduction of the acreage. Whereas Slovenian producers agreed to reductions, there was no similar inclination in the Backa (Wojwodina) so that the representative of the Ministry of Agriculture emphasized the necessity of a voluntary agreement in regard to the diminution of the acreage whilst legal measures in case of need were announced.

The acreage for 1936 has been increased but little as compared with 1935.

											Jugoslavian Exports:
Sept. 1st 1933	to Aug	. 31 st 19	934 .		-						. 3,303,796 lbs.
Sept. 1st 1934	to Aug	. 31 st 1	935.								. 4,568,892 "
Sept. 1st 1935	to May	1st 1	936.	•••	٠	•	•	•	•	•	. 7,581,760 "

The cool days prevailing in April and May 1935 delayed the growth of the plants. Sufficient rain in July provided the plant with the necessary humidity. The harvest generally began about August 20th and lasted up to four weeks. It was mostly favoured by good weather. Some regions had rain during that time and got a discoloured product as a consequence of **downy mildew**. This disease which generally did not become a danger, was combated partially a little more than in preceding years. The vegetation of the plants was not as rich as in normal years and lateral branches were frequently missing. The cones were generally small and richer in lupuline than usual.

In Wolhynia the humidity was rather insufficient in spite of considerable rains from time to time, so that the lateral branches remained short with a scarce onset of blossoms. Only little spraying was done against downy mildew. Colour and quality of the product were somewhat better than in 1934. The acreage of Wolhynia in 1936 will probably again be increased.

Congress Poland. In about 60 p.c. of the hop yards spraying was effected two to four times against downy mildew that existed nearly everywhere and more care has been given to the plants than in former years. The colour only partly satisfied whilst the quality of the product with small cones was better than in the past year. As a consequence of the discolouring during the harvest, the plants in some of the yards were picked in unripe condition, and about 5 p.c. of the crop being totally discoloured remained unpicked. One expects a reduction of the acreage of Congress Poland.

Galicia (Little Poland): The weather was less favourable for the growth of the plant than in other parts of the country. Traces of downy mildew which was not sufficiently combated, could be found nearly everywhere. Colour and quality of the product were as little satisfying as in 1934. It is intended to diminish the acreage.

Poland.

In the district of Great Poland (Neutomischel) lice were successfully combated whilst the combat against downy mildew was not crowned by uniform success. The colour was better, the quality lighter than in 1934. The acreage has been increased in 1935 and new plantations will also be erected in 1936.

Prices: The producers received after the harvest for choice quality 120 to 140 Zloty, for prime 80 to 120 Zloty, for good medium 60 to 90 Zloty, for weak medium and inferior 30 to 50 Zloty. Prices gave way after September purchases whereas in February and March 1936 inferior and medium qualities increased again in prices by from 10 to 20 Zloty.

Quality was judged:	<pre>prime</pre>	medium	inferior
	p. c.	р. с.	p. c.
Wolhynia	30	60	10
Congress Poland	35	40	25
Great Poland	35	50	15
Little Poland	10	60	30

The statistical central office has indicated the acreage of Poland to amount to 7,685 acres, viz. 4,389 acres for Wolhynia, 1,945 acres for Congress Poland, 966 acres for Galicia and 385 acres for Great Poland; the published commercial estimates therefore are surpassed by about 10 p.c. As further increases are intended in Wolhyina and in Great Poland, and taking the home demand for Poland and Danzig to be 660,000 lbs. approximately, there will remain about 4,850,000 lbs. for exportation, these estimates being based on a normal crop of about 5,500,000 lbs. As the majority of Polish hops are principally used for cheap and high fermenting beers their export is possible only at low prices and therefore influences the international hop-markets.

About 65 p.c. or more of the 1935 crop have consisted of medium and inferior qualities for which the producers only got from 30 to at most 90 Zloty, i. e. on an average less than first cost. Also Polish growers will not be able to work for years without profit whilst on the other hand profitable prices will only be assured by an improvement of quality and colour.

Of all Central European hops known the Polish hops lose its brewing value quickest, and we believe this is due to the choice of the seedlings, faults or mistakes during the harvest, and further treatment and kiln-drying. It is intended to create an institute for scientific research for hops at Dubno which will surely help to improve the quality of Polish hops.

	Imports into Poland:	Exports from Poland:
Sept. 1st 1933 to August 31st 1934		3,260,156 lbs.
" 1 st 1934 to August 31 st 1935	15,868 lbs.	3,831,213 "
" 1 st 1935 to April 30th 1936	13,004 "	3,927,308 "

In Alsace after hot days in March and April 1935 cold and rainy weather set in towards middle of May. This cold weather continued until the second half of June so that at this time the plant had not developed well. As a consequence of the wet spring there was a serious attack of lice, but later on these disappeared through hot and dry weather and by combating them accordingly. Downy mildew too, caused much trouble, for the dry weather prevailing since end of June and during the month of July was interrupted by storm and rain which favoured this pest to germ anew. The plants that made good progress in vegetation in spite of the dryness, were in bloom towards end of July and could derive further unexpected profit from much rain in August. The crop lasted from Sept. 2nd to Sept. 20th with mostly fair weather. The yield, as regards quantity, remained behind the excellent one of the past year; the product was rich in lupulin and of good colour. The acreage in 1935 was only 30 acres smaller than in the preceding year and amounted to 3516 acres which meant a reduction of two thirds as compared with 1913. If there are not more satisfying prices in the years to come, a further reduction of the acreage may be expected, especially in the more remote regions.

Prices set in with ffr. 500 per cwt., soon gave way to ffr. 400 to 450, later on rose to ffr. 500 to 550 and from the middle of October until January 1936 ranged from ffr. 350 to 575. At the end of October already the producers were said to have sold about 90 p.c.

Nord of France: The colour of the product remained generally unsatisfying. At the beginning of the crop downy mildew was present. Hops of the region of Steenvoorde mostly were of a spotted appearance. About 74 acres of the region of Monts suffered from hail, and approximately 6 p. c. of the crop remained unpicked. Before the crop contracts were effected at ffr. 400 to 450 per cwt. whilst in September ffr. 300 were paid and this price went down to ffr. 150 until the end of the year.

The acreage in the Nord of France was reduced from 1935 to 1936 by about 12 p.c. to approximately 495 acres.

The increasing acreage of countries with over-production such as Poland and Jugoslavia means a menace to the French market and this caused French hop growers to demand an increase of the import-duty on hops from ffr. 400 to ffr. 800 per 100 kilos. We believe that in spite of France.

the demanded increase of the import-duty the French brewing industry will not be in a position to discontinue purchasing high-grade hops from Czechoslovakia and Germany, because the average quality supplied so far by inland producers does not suffice for excellent beers. It would be logical now first to improve the natural quality of the inland product as suggested by the French brewing industry and afterwards to try and increase the import-duty. In this connection it may be interesting to state that to the French Agricultural School at Wagnonville a college for scientific experiments for hops has been joined.

Quality was judged as follows:	prime	medium	inferior
Alsace	p. c. 60 15	р. с. 25 35	р. с. 15 50
Fr	ench Im	ports:	French Exports:
	,497,748		621,969 lbs.
1934	,497,748 ,951,376 ,488,977		621,969 lbs. 3,034,026 " 1,740,278 "

A mild and wet winter 1935 with warm days towards end of April was followed by a mostly cool May whilst June brought abundant rain. The warm and dry summer retained the spreading of downy mildew which showed itself everywhere. All the more unexpectedly were the damages of downy mildew during the wet part of the crop.

The harvest began at **Poperinghe** on September 1st and lasted till about the twentieth day of that month. Only the hops of the first picking and originating from yards where sufficient spraying had been done of which, however, there were only a few, got a nice green colour whilst the majority was more or less discoloured. The conformation of the cones was normal or small. About 3 p. c. of the crop remained unpicked. In view of the low prices some of the yards were abandoned and some, on the other hand, were replaced by better sorts.

At Alost the harvest began on the 26th of August and was finished on about 25th of September. Here again discolouring of the later hops was noticed as a consequence of downy mildew whilst colour and quality of the earlier picked hops were as satisfying as in the preceding year. The average yield was about 1248 lbs. per acre at Poperinghe and approximately 1516 lbs. per acre at Alost.

At Poperinghe prices varied according to kind and quality, for "buvrinnes" from bfr. 150 to 600, for "fuggles" from bfr. 500 to 700 and for Tettnang and Hallertau seedlings from bfr. 800 to 1200. At Alost prices were somewhat higher.

Quality was judged:	prime	medium	inferior
Poperinghe		р. с. 50 40	р. с. 30 35
Belgian	Imports:	Belgian	Exports:
1933	29 lbs.	942	,210 lbs.
1934			,405 "
1935 4,476,3		841	,707 "

England.

Belgium.

The hop plants were backward during the first period of growth in 1935. Particularly the hard frost in May did some damage, especially in the low-lying areas of the Weald of Kent around Marden and Goudhurst. In Worcestershire and Herfordshire a new disease (Sclerotinia Sclerotiorum) has been discovered which has not been found before on hops in England. This disease affects the bine about three to five inches from the base, i. e. the bine becomes soft and rotten at the affected spot and later develops a fungus growth. Aphis appeared in Worcestershire and Herfordshire, but especially in Kent. Blight showed itself, like every year, and was combated by washing and powdering. In view of favourable and sunny weather in August the plants developed excellently although the amount of the crop was smaller than in 1934.

The quality of the crop, on the other hand, was sublime and surpassed all expectations. The picking commenced a little later than usual between the second and eigth of September and lasted up to the beginning of October. The colour was a little damaged by storms during the second part of the picking and some of the plantations broke down. The picking of the leading hop growers was considerably better than in the past year, and the hops of East Kent, Worcester and Hereford were particularly favoured. The quality of the "goldings" was very good; their colour was greener, but they were a little smaller than in 1934. The "fuggles" in Worcestershire were likewise very good whereas in Kent they did not come up to the standard of the past year. As a whole the quality of Kent hops remained considerably below that of Worcestershire. It was a difficult task for the Board to attain the average price guaranteed in view of the large differences in quality.

Quality was judged: prime p. c. 60 medium p. c. 35 inferior p. c. 5

With the 1935 crop the second year of the five-years-period of the H.M.B. began. The total English crop has been estimated at 248,300 cwt. as compared with 259,000 cwt. in the preceding year. In view of the fact that hops grown by brewers for their own use, or sold by producers under registered contracts, do not come under the marketing provisions of the Hops Marketing Scheme, the quantity of hops purchased by the Hops Marketing Board is given to amount to 227,000 cwt. and was only 2,000 cwt. larger than the estimated total demand.

The basis quantity of the producers has been fixed at 100 p.c. (as compared with only 97 p. c. in 1934) of which 96.5 p. c. were Quota-Hops amounting to 224,159 cwt., and 3.5 p. c., Non-Quota-Hops with 8,181 cwt.; the latter can only be sold after the sale of the Quota-Hops. An average price of \pounds 8.19.5¹/₂ for the total crop was realised which means that also in this year the average price guaranteed to the hop producers has been secured. Prices moved between \pounds 5.-... By end of March 1936 producers had received payments amounting to 99 p. c. against their Quota-Hops.

It was decided to destroy 80 p. c. of the existing stocks (about 25,000 cwt.) of the 1934 crop, and this decision was carried out in December 1935. The remaining quantity had to undergo the same uneconomical sort in May 1936 so that at the beginning of June there was only left a small quantity of the 1935 crop of less than 5,000 cwt. with the exception of old hops of 1931 and before. Competent quarters consider this measure as dangerous, for if the 1936 crop should prove to be inadequate, there would be no surplus hops in store and foreign hops would have to be imported. The Board, however, chose to take the risk. Besides, at the beginning of this year more than 1,000 pockets = 187,390 lbs. of 1935 crop all-faults, were withdrawn from the market and destroyed. For the 1936 crop there will be the same quota as last year, viz. 225,000 cwt.

Many complaints became manifest as to the mistakes caused by the market regulation. The valuation of the hops for the 1935 crop commenced 14 days later than in 1934. Prices were only made known on December 28th so that the breweries were kept in the dark for a long time as to the price which they had to pay for the lots of hops they had chosen by way of sampling. The valuation was only finished at the beginning of January. It may be admitted that the valuation committee was much hindered in their task by fog, for any artificial lighting proved to be inadequate for the valuation.

The Hops Marketing Board seems to have formerly believed that the merchants were an unnecessary and superfluous part of the organisation. However, it had to convince itself of the necessity and importance of **the experts of the trade**. The new valuation system which the merchants were called upon to join as valuators, proved to be complicated although this year the breweries were more satisfied in regard to the selection of the qualities. The method of sampling of the H. M. B. caused contradiction as in the case of small lots and small crops one sample out of ten could not represent the true average.

The 1935 crop was at last released on January 15th, 1936, but then only brewers or commissioners and factors authorised by brewers were allowed to effect purchases. However, the real taking over of the hops began later, for on January 15th not a single bale of hops had been weighed. The breweries were quite right in complaining about this unnecessary delay. It is generally demanded that in future the weighing of the bales should be effected before the official valuation is finished. The weighing of the bales was only terminated at the beginning of March! On February 12th the crop was released to the trade and exportation permitted.

The quota - system in the case of a small crop is connected with the disadvantage that those producers who have got a small crop, pick everything, even the worst, just to attain their quota. On the other hand those producers who have got a good yield are forced to leave unpicked and thus cause to rot even hops of good quality if the yield has already surpassed their quota. This happened in some cases with the 1935 crop. In this way preference is given to quantity instead of to quality.

The average price for five years of $\pounds 9.$ —.—. is regarded as being too high, especially if one considers that American hops of same quality including import-duty of $\pounds 4.$ —.—. per cwt. free London are sh. 30/— cheaper than English hops. Like in the past year the short period of sale of 28 days has again caused considerable resentment, and endeavours are being made with a view to bringing about a change until the coming crop.

In England there are 1043 hop producers as compared with 31,700 in Germany. 75 p. c. of the English hop crop are taken over by about 100 breweries and another 15 p. c. by the remaining 300 members of the Brewers' Society whilst in Germany there are 4417 industrial-breweries and 36545 home-breweries. The dissatisfaction of the English breweries with the work achieved so far by means of the regulations of the H. M. B. is easily comprehended if one realises that for the valuation of the quality of the 1935 crop amounting to 227,000 cwt. the time from September until the middle of January was required and another 6 weeks for the weighing of the bales so that from the beginning of the picking six months passed until the crop was completely available.

Import-Duty: The import-duty upon hops in England amounts to $\pounds 4$; the preferential import-duty upon hops from the Dominions to $\pounds 2.13.4$. per cwt.

Hops Marketing Board.

Shortcomings of the Hops Marketing System. Since the reduction of the beer-tax in 1933 the consumption as compared with the first three months of 1933 increased in 1936 by not less than 34.29 p.c. In some countries there is at present again a tendency towards increasing the beer-taxes in order to meet the reduced income during an adverse economical situation. The attention of these countries should be drawn to the English example which shows that by reducing the beer-tax and the sales prices respectively a stimulus is given to the consumption and the revenue from taxes will be increased at the same time.

	English Imports:	English Exports:
September 1st 1933 to August 31st 1934	. 6,505,436 lbs.	1,736,421 lbs.
September 1st 1934 to August 31st 1935		1,898,525 "
September 1st 1935 to April 30th 1936	. 4,884,945 "	1,177,904 "

Washington: The plants suffered from cold in spring 1935 and from heat during the summer months. Red spider caused considerable damage in August; it was too late to combate it; the Yakima Valley and the Moxee District were principally affected. As a consequence of dry weather there was nothing to be seen of downy mildew. In some parts the clusters were replaced by fuggles which are able to offer better resistance to the said disease. The picking began on August 20th and lasted until the middle of September during hot weather. Colour and quality of the 1935 crop were better than in the past year. The size of the cones was a little below normal. The approximate yield of the crop amounted to 57,000 bales of 200 lbs. each of which only 35,000 bales were picked so that roughly 40 p.c. remained unpicked.

Oregon: In view of the hot and dry weather during the 1935 period of growth red spider appeared particularly shortly before picking, and the Salem and Independence Sections suffered the most. Downy mildew was rarely noticed and had to be combated only at the beginning of the growing period whilst lice and mould did some damage. The crop was started on August 20th and lasted till end of September during favourable and hot weather. The quality did not come up to the average of past year, and the colour was rather poor-looking. 10 to 15 p.c. of the crop remained unpicked.

California: The general development of the period of growth was a favourable one. Due to want of pickers the picking lasted unusually long, from August 10th to September 23rd. Wages of up to 2 c per lb. had to be paid to the pickers and the general wages amounted to \$ 1.25 — \$ 1.50 per 100 lbs. of green hops. — The quality was good and in many parts better than in the past year. The conformation of the cones was smaller than usually which is probably due to the male plants having been taken out in order to obtain seedless hops. More than 10 p.c. of the crop remained unpicked.

Quality was judged:	prime	medium	inferior	
	p. c.	р. с.	p. c.	
Washington	40	50	.10	
Oregon	45	30	25	
California (Sonoma)	85	10	5	
" (Mendocino, Sacramento)	60	30	10	

The hop growers were in a deplorable position at the beginning of the 1935 crop. Prices in U.S.A. were below the average cost of production which in Oregon amounts to about 12-15 per lb., based on an average yield of roughly 1048 lbs. per acre.

At the beginning of the 1935 crop the existing surplus amounted to 40,000 bales of 200 lbs. each of the 1934 crop and to another 40,000 bales of older hops as compared with 43,292 bales on September 1st, 1934. According to our estimates the picked 1935 crop amounted to 38,700,000 lbs. equal to 193,500 bales of 200 lbs. each, taking the grown crop to be 47,080,000 lbs. The 1934 crop picked figured 39,195,000 lbs. or 195,975 bales.

Stocks on May 1st, 1936 according to reliable sources amounted to 28,265 bales or 5,650,000 lbs. of 1935 hops and to 77,984 bales of older hops.

At the end of August 1935 prices moved between 10 and 16 c per lb. Prices to growers for the 1935 crop were between 9 and 12 c per lb. and had a backward tendency so that in the later course of the season buyers could effect purchases at about 2 c cheaper. In spite of the considerable stocks prices for hops of prime quality were generally maintained, as producers had not abandoned hopes for a marketing agreement. Even when at the beginning of March 1936 the A.A.A. (Agricultural Adjustment Act) was declared unconstitutional and as a consequence the whole "Marketing Agreement" which was so much talked about last year, broke down, producers continued to keep back their offers so that prices could more or less be maintained in spite of large stocks. End of June 1936 prices rose as crop prospects were bad owing to downy mildew.

Sales prices to breweries in autumn 1935 quoted from 9 to 17 c per lb. and later in the season fell 2-3 c. Imported hops obtained 60-100 c per lb. duty paid cif New York and later on went back to 45-75 c. New York State Hops as usual could be sold dearer than Pacifics varying between 27 and 33 c to growers as compared with 36-42 c per lb. in 1934.

Development of Prices.

U.S.A.

Since end of December 1935 endeavours have been made on the part of the hop growers to arrive at a regulation of hop growing by means of a new marketing agreement. However, only the following points were decided upon: 1) Fixing of the yearly quota of production; 2) Fixing of the classes of qualities; 3) Permanent supervision of the production through a cooperative organisation, the "National Hop Growers Inc.". — For 1936 a reduction of the acreage of 20 p. c. had been foreseen.

The intended reduction of 20 p. c. for 1936 has been realised more or less, and this in view of the unremunerative prices for the 1935 crop, the large stocks as well as too large a crop at a normal average yield of the acreage existing heretofore, and not in the last place compulsorily on account of scarcity of funds, for considering the present development of prices bankers have not advanced money to farmers with small financial means for the cultivation of their acreage.

As compared with the acreage of 1935, a large reduction can be ascertained in spring 1936 in the three Pacific States: It will amount to at least 1500 acres in Washington (total acreage in 1935: 6300 acres), more than 3500 acres in Oregon (1935: 26,000 acres), about 1700 acres in California (1935: 6900 acres). Half was ploughed out and therefore represents a permanent reduction.

In the State of New York, on the other hand, the cultivation of hops has slowly increased during the last years. In 1932 there were only 6 hop yards with a total acreage of 27 acres; in 1934 there were already 85 acres and in 1935 the acreage amounted to 120 acres with a production of about 80,000 lbs. For 1936 the acreage is given at 200 acres. The yield per acre of the New York State Hops is by far smaller than that of any other American hops.

The consumption of hops for brewing purposes can be estimated at 29,850,879 lbs., based upon 45,228,605 barrels in 1935 and a dose of hops of 0.66 lbs. per barrel. Besides, about 900,000 lbs. will be used by consumers others than breweries. A further increased demand is to be expected for 1936.

The importation of hops has also been augmented and amounted to 4,340,280 lbs. during the time September 1st, 1935 to April 1st, 1936, as compared with 3,973,188 lbs. in the preceding year. About 75 p.c. of the total importation originate from **Germany** and **Czechoslovakia**, whilst other countries of importation have been Jugoslavia, Poland, France and Belgium.

The exportation of hops from U.S.A. amounted to 5,970,913 lbs. from September 1935 to April 1936, as compared with 6,145,109 lbs. during the same time of the past year. About 80 p. c. of the exported hops went to England and Ireland.

In U.S.A. there were 675 breweries in April 1936; the financial position of the brewing industry has generally improved in the past year.

									Imports to U.S.A.	Exports from U.S.A.
calendar	year	1933.							5,957,302 lbs.	6,708,865 lbs.
"		1934.								6,001,492 "
"	,,	1935 .	•	•	•		•		5,272,794 "	6,221,368 "

In British Columbia the 1935 crop has been more abundant than in the past year, and an average yield of 1572 lbs. as compared with 1288 lbs. per acre in the preceding year has been obtained. The acreage has been increased by 124 acres in 1935 so that the acreage for the 1936 crop will amount to 1247 acres.

The average price was 29.1 c as compared with 32 c in 1934 and 33 c in 1933.

	Canadian Imports:	Canadian Exports:
1933	675,287 lbs.	773,275 lbs.
1934		347,514 "
1935	1,509,175 "	340,749 "

The import-duty upon English hops has been reduced and at the present rate of exchange amounts to $\pounds 1.7.$ -, per cwt. as compared with the general tariff of $\pounds 3.12.$ -, per cwt.

In Germany the stocks of the D.H.V.G. (German Hop Traffic Company) at the beginning of June 1936 amounted to about 2,200,000 lbs. of 1935 hops and to approximately 606,000 lbs. of 1933 hops. In Czechoslovakia the surplus stock of the 1935 crop amounted to about 330,000 lbs. at Saaz, about 88,000 lbs. at Auscha, about 60,000 lbs. at Raudnitz, less than 11,000 lbs. at Dauba, making a total of roughly 490,000 lbs. In Jugoslavia the stock of 1935 hops is estimated at about 66,000 lbs., in Poland at about 88,000 lbs., in France at a little more than 110,000 lbs., in Belgium at about 496,000 lbs.

Whilst in **Germany** in view of obligatory warehousing the stocks of the brewing industry will suffice until April 1st. 1937, the stocks of the breweries of the **remaining countries** are to be regarded as smaller than normally, especially where the increase of the beer production continues to show a rising tendency. This is reflected by the continuous demand for hops during the present summer months and there may be expected a good demand for the coming crop.

Reduction of Acreage in U.S.A.

Canada.

Stocks End of

June 1936.

Beer-Production 1935	Dose of hops per barrel	Hop Consumption in 1000 lbs.
American barrels	in lbs	in 1000 lbs.
2 116 616	0.67	1,418
		77
		333
		6,876
		5,084
	0.64	41
	0.42	791
	0.48	6,202
33,876,178	0.58	19,648
1,169,933	0.55	643
350,213	0.55	193
	0.64	581
		437
		2,018
		631
		905
1,972,611	0.51	1,006
81,169,430	—	46,884
22,654,783	1.29	29,225
2,634,693	1.94	5,111
106,458,906		81,220
450,761	0.90	406
2,649,179	1.16	3,073
1,787,706	0.97	1,734
1,097,505	0.64	702
1,790,262	0.64	1,146
61,351		71
3,347,901	0.64	2,143
45,228,605	0.66	29,851
162,872,176		120,346
	1935 American barrels 2,116,616 120,146 469,507 11,855,267 6,602,071 63,907 1,882,289 12,920,392 33,876,178 1,169,933 350,213 907,486 567,499 3,152,770 986,732 2,155,813 1,972,611 81,169,430 22,654,783 2,634,693 106,458,906 450,761 2,649,179 1,787,706 1,097,505 1,790,262 61,351 3,347,901 45,228,605	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

World's Hop Consumption 1935/36.

Contracts.

In Germany contracts are prohibited whilst in Czechoslovakia and in Jugoslavia they have no legal force. In Belgium contracts have been closed at the beginning of June 1936 for October/November delivery at bfr. 450–480, and at the end of June quotations fell to bfr. 430. From U.S.A. contracts over a period of three to five years have been reported at 14–16 c. for hops from the district of Washington. Contracts for 1936 hops are reported in May from Mendocino at 13 c. from Oregon at $12-12^{1/2}$ c., from California at $12^{1/2}$ c. and in June from Oregon at 12 c.

Growth of the 1936 Crop.

During the spring months of 1936 there fell more rain than last year. In June, hot weather set in and generally the growth of the plants has developed satisfactorily. The prospects for the coming crop are good.

Germany: Uncovering was started in March and finished in April. The plants have passed the winter all right. The hop yards suffered from much rain and hail storms in the Tettnang and Hallertau district. In the Spalt district and the Hersbrucker Gebirge as well as in Wurttemberg there appeared fleas and lice. Downy mildew was noted in all German cultivating districts more or less as a consequence of changing weather from beginning of June up to middle of July. It has been combated everywhere, but the danger of further damage still exists. Generally speaking the growth of the plants end of June was normal. The hot days were harmful to the plants in the Spalt district, but of advantage in Wurttemberg. Since June 20th the plants reached top wire in the Hallertau district, especially in the lighter sites. The yards in the whole of Germany have been cultivated with great care and are in excellent condition.

In Czechoslovakia when uncovering the plants, grub-worms have been noticed. In May the fields received sufficient rain and day temperatures at that time were low. On Mai 27th and 28th there were strong hail storms in the Eger Valley. The weather was mostly rainy till beginning of June. The plants were strongly attacked by lice. The growth developed slowly and amounted to about 5 inches per day. End of June more than three quarters of the top wires were reached and there were lateral branches in abundance. The sections in the valleys still suffer from lice. In the Auscha district towards middle of June strong attacks of lice could be noticed especially in the valleys.

In **Poland** fleas appeared in May, but soon disappeared through favourable weather. Beginning of July the condition of the hops is reported to be healthy although not uniform.

In Alsace the hops could overcome the danger of lice and are of good appearance at the time. Jugoslavia: The wet and cold weather in May and during the first half of June did no damage; the plants developed satisfactorily through favourable weather later on. End of June top wire was reached; downy mildew and lice were combated. Hail storms in Styria did some damage beginning of July.

From Belgium downy mildew and lice are reported.

In **U.S.A.** the winter did no damage to the plants. In the second half of May and at the beginning of June downy mildew appeared in the three Pacific States and did considerable damage, especially in Oregon, Sonoma and Mendocino. For the last three years downy mildew has not been noticed in such abundance.

In England cold weather prevailed until June, but the plants have well developed. Aphis appears strongly and especially in Kent there are many lice whilst there was little to be seen of downy mildew. Prospects are good.

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 10th, 1936:
1 US \$\$ = Reichsmark (RM) 2.48 1 £ = US \$\$ 5.02 1 US \$\$ = French Francs (ffr.) 15.10
1 RM = US \$\$ 0.40 1 US \$\$ = Czechosl. Crowns (Kc.) 23.90 1 US \$\$ = Belgian Francs (bfr.) 29.57
1 US \$\$ = Pound Sterling (£) - 4. - 1 US \$\$ = Jugosl. Dinars 43.8 1 US \$\$ = Polish Zloties (Zl.) 5.28