

Cable address BARTHSOHN NUBRNBERG Telephone: No. 50851/54 Teletype: No. 06/2280 Hop form Barthhof-Hallertau Office and Warehouse Nuernberg, Glocketholstr. 24/26

Nürnberg, July 30th, 1956 P. O. B. 331

Hop Report 1955/56

The economical upswing in most countries increased the tendency for higher prices on the world market. The start of an active trading policy by Eastern countries may be registered as noteworthy.

The position of Western Germany continued to improve both on home and foreign markets. Necessary considerable investments and high taxes, however, have led to an increasing maladjustment in the ratio of working capital to funds at short terms. In contrast to this, authorities dispose of bulging surpluses and this misproportion points to an urgently necessary reform of taxation. On May 18th, 1956, the *Bank Deutscher Länder* increased the rate of discount to 5.5% and ordered restrictions of credit.

An Increased Production of beer during 1955 as compared with 1954 is shown in the following countries: Australia 5%, Belgium 4.4%, Belgian Congo 24.7%, Brazil 8.3%, Canada 6%, Chile 17.4%, Denmark 4.8%, Western Germany 14%, England 2.5%, Finland 6.1%, France 19.6%, Indonesia 5.2%, Italy 6.7%, Japan 2.4%, Luxembourg 1.6%, Mexico 4.1%, Austria 6.3%, Peru 4.3%, Portugal 8.8%, Saar 10.7%, Spain 16.4%, Sweden 8.9%, Switzerland 7.4%, U.S.A. 1.5%, Uruguay 13%.

A Lower Production in 1955 as against 1954 is to be noted in: Argentine 2.8%, Cuba 1.9%, India 8%, Malta 13.8%, Panama 5.7%, Paraguay 8.5%, Union of South Africa 12.2%.

Economical

Situation

Production of Beer

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Production of Beer 1955									
Country	1000 bbl. of 5	31 gall. each	Country	1000 bbl. of 31 gall, each					
Germany West 30,000 East 10,225 England USSR.*) Belgium France Czechoslovakia Poland Austria Denmark Ireland Sweden *) Switzerland Netherlands Italy Spain Hungary Finland Saar Norway Jugoslavia Luxembourg Greece Norway Jugoslavia Luxembourg Greece Norway Jugoslavia Luxembourg Greece Portugal Malta Canada Columbia Columbia Columbia Columbia Chile Uruguay Chile Cuba Venezuela Dominican Republic . Paraguay Nicaragua	1000 bbl. of 3 40,225 33,947 16,618 11,185 10,666 7,670 4,219 3,702 3,087 2,666 2,572 2,192 2,032 1,434 1,364 1,300 1,139 970 776 661 644 320 243 154 43 13 90,284 8,882 6,647 5,818 4,293 2,983 1,108 1,005 937 821 554 260 209 128 109 61 46 37 34	31 gall. each 149,842	b. f	$\begin{array}{c} 1000 \ \text{bbl. of} \\ 124,216 \\ 13 \\ 13 \\ 13 \\ 937 \\ 738 \\ 358 \\ 324 \\ 258 \\ 145 \\ 128 \\ 85 \\ 79 \\ 60 \\ 39 \\ 38 \\ 35 \\ 34 \\ 27 \\ 17 \\ 17 \\ 4 \\ 3,475 \\ 511 \\ 446 \\ 279 \\ 224 \\ 187 \\ 59 \\ 55 \\ 49 \\ 34 \\ 34 \\ 26 \\ 21 \\ 20 \\ 14 \\ 2 \\ 8,480 \\ 1,665 \\ \end{array}$	31 gall, each 149,842 124,242 3,269 5,436 10,145 292,934				
c. f.	124,216	149,842	*) estimate						

Beer Output in Western Germany

These figures include 270,328 bbls. delivered tax-free to the occupation forces (1954 = 339,890 bbls.) as well as exports and other sales against foreign currency totalling 610,675 bbls. (1954 = 496,462 bbls.).

Newspaper clippings provided the following details:

USSR. Production of beer rose 60% from 1940 to 1954. The increase was 13% from 1952 to 1953 and 3% from 1953 to 1954.

Poland. Output of beer increased 274% from 1937 to 1955 and ought thus to be computed at 4,219,000 bbls.

Hungary. Production of beer in 1953 is indicated as five times the output of 1938 and would, therefore, be 1,300,000 bbls.

Bulgaria. In this country the output of beer is said to have risen 30% from 1948 to 1952.

Albania. Production of beer increased 24.4% between 1952 and 1953.

Roumania. Output of beer in 1953 is said to have been 143% higher than in 1938 and would, therefore, stand at 1,139,000 bbls.

Yugoslavia. The capacity of the brewing industry in this country is indicated at 2.0 gallons per capita of population. Production, however, is said to be only 63 % which would correspond to 644,000 bbls.

Czechoslovakia. Consumption of beer in this country is indicated at 20.0 gallons per capita which would mean a yearly production of 7,670,000 bbls.

Crop 1954 (Supplement)

Imports and exports of hops crop 1954 for various countries during the period September 1st, 1954, to August 31st, 1955, can now be stated as follows:

	Import	Export
Germany	307,542 lbs.	12,890,296 lbs.
Belgium	3,111,572 "	317,462 "
England	550,000 "*)	4,830,278 "
U.S.A.	4,565,506 "	12,218,114 "

*) estimate.

In Germany, the overhang of abt. 23,000 cwts. of Hallertau hops crop 1954 could not be disposed of until the autumn of 1955. These hops, therefore, were a source of uncertainty which overshadowed the hop market's development for the new crop 1955.

Crop 1955

The relatively mild winter 1954/55 brought considerable precipitations which improved soil moisture. A cold wave in the middle of February with heavy **Snow Cover** remaining until the last decade of March retarded **Spring Work** until the end of April 1955.

The already delayed growth of the hops was further retarded by unfriendly weather during springtime, and climatic conditions could not benefit the development even in early summer. Aphids and Red Spider were no danger for the hops as a consequence of weather conditions. Downy Mildew, however, had to be carefully controlled which was often difficult under adverse conditions.

Hop yards could set off the lost development under more favourable weather during the important months of July and August. Local damages by Hail were mostly slight.

Picking was about a fortnight later than normal and in addition delayed by lack of pickers, so that the hops remained on the vines longer than usual and were sometimes exposed to **Discolourations** by weather influences. In spite of this, the harvested hops were generally good even in colour.

Growth of the Hop Crop 1955 in Germany

Acreage	e, Helu		unction .	1754 anu	1933	
	Acreage	Yield	Production	Acreage	Yield	Production
	1954	Pounds	1954 D	1955	Pounds	1955
	Acres	per acre	Pounds	Acres	per acre	Pounds
Hallertau	13,220	1,746	23,080,178	12,767	1,525	19,469,81
Spait	2,214 1,611	1,424	3,153,460 1,604,398	2,187 1,505	1,364 1,181	2,982,27
	326	1,452	473,217	319	1,489	1,777,12
Bavaria	17,371	1.630	28,311,253	16,778	1,472	24,704,30
ettnang	1,774	1,449	2,570,784	1,710	1,661	2,840,29
R.H.W	576	1,075	619,493	544	1,071	582,56
Baden	86	1,461	125,662	84	1,325	111,33
Cheinpfalz	74	1,296	95,900	71	1,573	111,66
	19,881	1,596	31,723,092	19,187	1,478	28,350,164
aaz (Zatec)	17,804	433 743	7,714,116	17,799	377	6,715,87
Auscha (Ustek)	4,453	743	3,306,018	4,500 17	611 434	2,751,45
Zechoslovakia	22,257	495	11,020,134	22,316	424	9,474,70
	2,496	1,310	3,269,422	2,471	1.402	3,463,42
Dep. Côte d'Or	420	394	165,345	420	892	374,78
Northern France	568	1,153	654,766	556	1,289	716,49
orraine	49	900	44,092	62	960	59,52
rance	3,533	1,170	4,133,625	3,509	1,315	4,614,22
Alost	581	1,328	771,610	568	1,562	887,35
operinghe	1,223	1,172	1,432,990	1,161	1,517	1,761,47
/odelée	22	1,102	24,251	25	1,146	28,60
Belgium	1,826	1,221	2,228,851	1,754	1,526	2,677,48
lovenia	3,833	1,022	3,918,676	4,151	968	4,020,42
Sacka	939	758	712,086	865	420	363,76
ugoslavia	4,772	970	4,630,762	5,016	874	4,384,18
Austria	59	596	35,163	69	863	59,52
Jalicia	314	913	286,598	351	829	291,11
eón	383	455	174,163	376	795	299,05
Asturias	77 32	432	33,289 10,914	76 32	550 310	41,77
Spain	806	626	504,964	835	769	641,80
Sweden	22	366	8,047	15	808	12,12
	17	1,543	26,235	17	1.543	26,23
Switzerland						
Poland	4,324	644	2,783,307	4,324	622	2,687,84
JSSR	7,413	892	6,613,800*)		905	6,708,377
Continent	64,910	982	63,707,980	64,456	925	59,636,74
(ent	11,589	1,410	16,337,629	11,425	1,478	16,881,94
lants	583 116	1,067 1,292	622,028 149,913	585 110	1,452 1,435	849,54
	2,019	1,247	2,517,323	1,927	1,404	2,705,20
Hereford	4,405	1,202	5,297,433	4,402	1,292	5,687,97
Worcester	1,994	1,279	2,550,391	1,956	1,227	2,400,80
Other Counties	50	1,514	75,728	52	1,489	78,92
England	20,756	1,327	27,550,445	20,457	1,406	28,762,3
Surope	85,666	1,065	91,258,425	84,913	1,041	88,399,0
Washington	13,911	1,658	23,074,115	13,000	1,600	20,800,18
Pregon	5,705	1,229	7,011,069	3,900	1,180	4,601,9
California	6,306 1,602	1,598 2,067	10,080,092 3 311,971	5,200 1,597	1,560 2,104	8,112 0
	27,524	1,580	43,477,247	23,697	1,556	36,874,2
	<u> </u>	1				
Quebec	} 50	448	22,377	12 5	46 287	
Brit. Columbia	, 1,030	1,574	1,621,703	1,10ŏ	1,243	1,366,9
anada	1,080	1,522	1,644,080	1,117	1,225	1,368,94
'asmania	1,349	1,560	2,104,842	1,349	2,211	2,983,0
	420	1,748	734,132	420	1,786	750,00
ustralia	1,769	1,605	2,838,974	1,769	2,110	3,733,04
lew Zealand	717	1,361	975,536	747	1,613	1,205,0
lagano	655	1,259	824,520	630	1,263	795.80
Iokkaido	84	735	61 729	72	796	57,32
amagata	185	1,243	229,940		1.00.1	
ukushima	} 556	1,081	600,974	642	1,304	836,80
amanashi				J	1 057	1 /00 -
apan	1,480	1,160	1,717,163	1,344	1,257	1,690,04
	247	669	165,345	247	680	167,99
Ianchuria						1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Argentine	319	554	176,809	317	466	4/,/
		554 617	176,809 175,265	<u>317</u> 405	<u> </u>	147,7 342,59

Acreage, Yield and Production 1954 and 1955

*) estimate **) Official Weighings on April 27th, 1956

Weather de	ata from	the Expe	erimenta	l Hop Fa	rm Hüll/I	Hallertau	
1955	March	April	May	June	July	August	Sept.
Precipitations per month (mm)	20	48	111	94	160	52	102
Monthly average of air temperature ⁰ C	0.4	6.0	10.1	14.8	17.0	15.7	12,2
Maxima of air temperature °C	22.3	27.1	26.5	28.2	31.7	27.3	27.1
Minima of air temperature °C	- 18.8	- 5.9	- 2.5	+0.6	+8.1	+6.2	- 0.4
Monthly average of rela- tive air humidity %	73	76	77	78	82	82	84
Other data:							
Snowfall Hoarfrost Storm Thunderstorm Hail	11 days 1 " – – –	3 days 11 " – 1 "		1 day 1 " 6 " -	- - 6 days -	– – 5 days 1 "	1 day 2 _,

Hallertau. Spring work was drawn out until the end of April 1955. The young shoots developed slowly under cold and dry weather. Temperatures rose in the beginning of May, but favourable conditions for growth set in only at the end of May/beginning of June. Grubworms occasioned local damages. Hail by the end of May and high Winds at the beginning of June caused some damages especially in the district of Wolnzach. Preventive sprayings had to be effected against Downy Mildew, whereas parasites were scarcely noticeable.

Warm weather in June fostered the development of the gardens. The plants showed a strong set of Laterals. Downy Mildew was locally much in evidence. The hops reached the height of the trellises on the average by the beginning of July. First Burrs were occasionally noticeable at that time. Moist and sultry weather benefitted the hops which were in full Bloom by the end of July. Dry and warmer weather by the middle of August favoured a quick Formation of the Cones after a long drawn out blooming stage of the hops. Picking was later than normal and started during the first days of September.

Quality. The cones of Hallertau hops crop 1955 were of smaller and more uniform size than the year before. Lupulin of fine yellow colour was amply present. The hops were of fine green colour even if discolourations by weather appeared more than usual. At the same time, cones with off-colour tips were somewhat more present than formerly. The hops showed normal clean picking in spite of lack of labour.

Spalt. Uncovering and Cutting was finished by the beginning of May 1955. Plants had generally wintered well. Wireworms occasioned local damages. The month of May with generally cool to cold nights was not favourable for growth. The hops, however, could considerably improve their stand in June under warmer weather and welcome rains. The plants were healthy and showed numerous strong Laterals. Occasional local damages by Hails were experienced.

The hops reached the height of the trellises by the beginning of July in spite of cool weather and where showing some overhang. Parasites were scarcely in evidence, whereas **Downy Mildew** had to be controlled. **Bloom** was general by the end of July. The formation of the cones was somewhat slow under cold and wet weather. Dry and warm weather since the middle of August was very welcome. **Picking** began sporadically on August 25th in early gardens, but was general only by the end of August. Lack of labour and sometimes unfavourable weather made the harvest difficult.

Quality. The Spalt hops crop 1955 showed cones of middling size with good colour and relatively few discolourations. Lupulin was amply present and of fine yellow colour and excellent aroma. It must be noted, however, that Spalt hops crop 1955 were not dried as carefully as customary. These hops tended to become warm in storage, and shrinkage under kilning was exceptionally high. Clean picking had suffered from lack of labour.

Tettnang. Spring work was delayed by the late winter. Temperatures were constantly lower than normal until the end of May/beginning of June 1955 and there were even nights with **Frost.** Very warm weather since the middle of June was beneficial for the hops. Aphids appeared locally somewhat stronger than on the average. The height of the trellises was reached generally by the end of July and the plants presented a good overhang. Laterals were amply present. The average stand of the gardens did not show, however, the luxuriant growth of former years. At this time, dry and warm weather was eagerly awaited for the development of the plants. Rain and thunderstorms, however, appeared by the end of July/beginning of August so that precipitations became irksome notably in gardens on heavy soils. The hops were in full **Bloom** by the end of July. **Downy Mildew** had to be carefully controlled.

Hot summer weather began in the middle of August and was very welcome for the formation of the cones. Picking started sporadically during the last decade of August in early locations, whereas the harvest was in full swing only by the end of that month. Inclement weather and lack of pickers — especially noticeable here and in Hersbruck — delayed the harvest which was finished by the end of September.

Quality. Tettnang hops crop 1955 showed somewhat less uniformly sized cones than the year before and were not as satisfactory as usual regarding texture and colour. Lupulin and aroma, however, were of the usual excellent quality. It is to be noted for Tettnang, too, that the drying of the hops as well as clean picking left somewhat to be desired.

Wurttemberg. Spring work was delayed in consequence of a late winter. The cool weather in April 1955 changed only by the end of that month so that the plants could develop better. The weather was mostly too cold in May, but ample precipitations and warmer weather in June benefitted growth. Downy Mildew was controlled, whereas there was practically no infestation of parasites. Some Hails in the beginning of June occasioned local damages. The gardens had generally reached the height of the trellises during the first half of July and showed some overhang. Sultry weather together with sometimes more than ample rains resulted in a good development of the plants. Early gardens were in full Bloom by the end of July, whereas on late varieties bloom was beginning at that time.

Gardens showed a good stand by the end of July/beginning of August. The formation of the cones started on early hops. Warm and sunshiny weather by the middle of August was very welcome for the development of the cones. The harvest of early varieties began the first days of September 1955 and that of late hops one week later.

Quality. Wurttemberg hops of crop 1955 had cones of smaller size than in former years. The colour was fine and green, lupulin was ample and of good aroma. Drying and clean picking was satisfactory.

Hersbrucker Gebirge. The month of March 1955 was very cold and the Snow Cover disappeared rather late. Spring work began during the first week of April in gardens on lighter soils but was in full progress only by the second half of that month. There were Frosts until the end of April and the plants could show a better growth only under warmer weather in May. The first half of June was humid and temperatures were cool to cold. Warmer weather in the second half of June benefitted growth considerably. Downy Mildew had to be carefully controlled, whereas Aphids and Red Spider were scarcely present.

Warm weather and sometimes excessive rainfalls during the first half of July improved the average stand of the hops. The plants reached the height of the trellises on the average, but did not show any considerable overhang. Laterals were plentiful. Bloom of early varieties began during the second half of July. The general aspect was not so uniform as in earlier years and especially Downy Mildew was locally sometimes much in evidence. Late varieties showed a better formation of the cones than originally expected. Picking of early varieties began about August 26th, and during the beginning of September in late gardens. The harvest was finished within about four weeks. Lack of pickers delayed the work which in addition suffered from inclement weather.

Quality. The moist growth in 1955 resulted in often bigger sized cones than usual. The colour of Hersbruck hops was fine green, healthy lupulin of good aroma was amply present. It may be expressly stated that drying was better than in former years in spite of the wet growing conditions in 1955. Picking, too, was relatively clean.

The annual inspection of the districts of production by the end of August/beginning of September 1955 resulted in the following estimates:

			Yield estimated lbs	Yield harvested lbs.
Hallertau.			19,850,000-20,950,000	19,469,815
Spalt .			3,200,000	2,982,273
Tettnang .			2,530,000	2,840,296
Hersbruck			2,100,000	1,777,128
R.H.W			600,000	582,566
lura .			500,000	475,091

110.000

110,000

30.100.000

111,332

111,663

28.350.164

Baden . .

Rheinpfalz

Total . .

The result of the estimate appeared to be somewhat high considering the general set of cones. Hops, however, were heavier than the year before and the final result of the harvest remained only a few percent under the lowest bracket of the estimate.

29.000.000-

Origin	total resin content anhydric	Soft Resins	96	Humu- lon	%	Lupulor + Frac- tions of softresi	%	Hard resins	%	Bitter value Wöllmer
Hallertau	18.3	15.7	85.79	6.8	37.16	8.9	48.63	2.6	14.21	7.8
Hallertau/Au	17.4	15.6	89.65	6.6	37.93		51.72	1.8	10.35	7.6
Spalt	19.4	16.5	85.05	7.2	37.11	9.3	47.94	2.9	14.95	8.2
Tettnang	19.5	16.4	84.10	6.9	35.38	9.5	48.72	3.1	15.90	7.9
Wurttemberg	20.0	17.6	88.00	7.3	36.50	10.3	51.50	2.4	12.00	8.4
Hersbruck	20.3	17.7	87.19	7.9	38.91	9.8	48.28	2.6	12.81	9.0
Rheinpfalz	19.2	16.5	85.94	7.5	39.06		46.88	2.7	14.06	8.5
Baden	18.8	16.1	85.64		31.91		53.73	2.7	14.36	7.1
D.D. R .	15.9	12.3	77.35		37.10		40.25	3.6	22.65	6.6
Alsace	18.6	16.7	89.78		45.70		44.08	1.9	10.22	9.4
France (Nord)	16.8	13.5	80.35	5.3	31.55		48.80	3.3	19.65	6.2
Belgium	17.3	14.5	83.82	6.3	36.42		47.40	2.8	16.18	7.2
Saaz	16.6	12.9	77.71	5.1	30.72		46.99	3.7	22.29	6.0
Yugoslavia	15.7	13.5	85.99	7.3	46.50		39.49	2.2	14.01	8.0
English Fuggles	16.3	12.8	78.53		26.38		52.15	3.5	21.47	5.2
U.S. Seedless	17.9	15.3	85.47	6.0	33.51		51.96	2.6	14.53	7.0
Russia	16.9	13.3	78.70	5.5	32.54	7.8	46.16	3.6	21.30	6.3

Hops crop 1955 showed generally high values of analysis. It has to be pointed out, however, that crop 1955 had a lower resistance against storage deterioration than usual. Regularly effected analysises demonstrated that the transformation of soft resins into hard resins resulted quicker and earlier than normally and the wet growing season of crop 1955 may be considered one of the reasons.

Purchases began slowly under the shadow of the big overhang of hops crop 1954 even if the second smaller crop since 1953 and growing output of beer everywhere made for a bigger demand of hops. The subsequent development of purchasing was influenced by a slow harvest which was a result of lack of labour and periods of rainy weather.

First trading began as usual in Tettnang and could only be effected in small quantities as fully dried hops were scarce in consequence of lack of pickers. Bids were constantly increased by purchasers and this influenced the tendency in other districts of production. Farmers were reluctant sellers until the middle of September as prices rose constantly. At this time, demand sometimes became stormy and prices advanced rapidly. This development reached a high point by the end of September. Slower trading during the first decade of October 1955 resulted in somewhat lower quotations. Demand increased again, however, by the middle of October and prices rose once more as the districts of production were drained of hops.

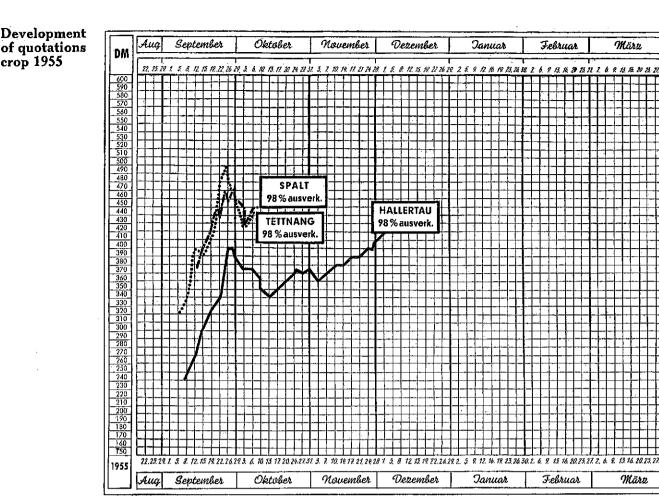
Intense demand and smaller supply in Spalt and Tettnang hops resulted in an extraordinary discrepancy of DM 100.— between quotations in these districts and those of the Hallertau. Bitter Values

of Crop 1955

Hop Purchase

Crop 1955 in

Germany



DM

600 590

360 350

15

1954

HALLERTAU ----- SPALT ---- TETTNANG

Tettnang. First purchases of small quantities were effected at DM 320.— in the beginning of September, but prices had risen until DM 400.— by the middle of that month. At that time, one third of the crop had changed into second hands already. Quotations increased until DM 490.—/500.— on September 26th under active trading. These top prices could not be maintained and quotations dropped to DM 430.—/440.— in the first days of October. About 90% of Tettnang hops were already sold at that time. The few remaining lots changed hands by the middle of October on a somewhat higher level.

Spalt. First purchases of single bales were effected on the basis of DM 320.—/330.—, but prices rose within one week to DM 400.—/410.— by mid-September. Heavy demand resulted in quotations up to DM 470.—/480.— with only small occasional fluctuations until the end of September. Prices declined to DM 430.—/450.— in the beginning of October, and the district was sold out on this basis by mid-October.

Hallertau. First quotations of DM 240.—/250.— under slow trading increased quickly up to DM 300.—/310.— by the middle of September with farmers reluctant sellers and reached DM 400.— under frantic activity by the end of September. The general quiet on the market in the first half of October resulted in a decrease until DM 330.—/340.—, but brisk purchases during the second half of October brought the level up to DM 370.—. About 90% of the crop was in second hands at that time. Quotations were up to DM 410.— by the beginning of December under quiet but constant activity, and last remaining quantities changed hands on the basis of DM 470.—/480.— later on.

Hersbruck. Purchases began slowly on September 8th/9th as farmers were not inclined to sell. First quotations of DM 200.—/220.— advanced quickly to DM 260.—/270.— for limited quantities until mid-September. Following the market's general upward trend, prices climbed to their top of DM 350.— by the end of September and were around DM 290.—/310.— during the first half of October. The district was mostly sold out on this level until the end of that month.

Wurttemberg. The small crop in this district was taken up by the trade and the cooperative during the time from September 15th to September 25th, 1955. First lots were sold at DM 240.—, whereas final quantities changed hands at DM 300.—.

Inventories of Hallertau hops of the old crop 1954 have not been completely disposed of until now, although considerable quantities have been sold to the *Deutsche Demokratische Republik* at reduced prices. Stocks of this provenience still in hand are now estimated at about 3500 ctws. Final payments for hops crop 1954 to farmers in the Hallertau are yet to be effected.

The cooperatives have taken over considerably smaller quantities of hops crop 1955 than the year before. These hops were sold out until the middle of January 1956. The following table shows the informations available about the activity of the several cooperatives during the season of 1955/56:

	Quantities	Grading and Payments								
Cooperative	handled	Choicest		Grade I		G	rade II	Grade III		
	Crop 1955	%	DM	%	DM	%	DM	%	DM	
Hallertau	330,700lbs.		Payment	s rang	ged until l	 DM 35	50.— per	 50 kil	os	
Spalt	441,000 "	3	438.—	71	435	26	423,—		<u> </u>	
Tettnang	11,000 "	.		73	435	25	425.—	2	400	
Hersbruck	441,000 "			50	300.—	43	280	7	262	
Wurttemberg*)	187,400 "			62	305	20	290	13	280	
Jura	27,500 "	_			363.—	·	330.—		300	

*) 5% of the total accepted as off-grade for best possible disposal.

It seems that the cooperatives intend to improve their trading basis by controlling part of the harvest through compulsory delivery. Members are obliged to deliver at least the following percentage of their hops:

 $10^{0/0}$ in the Hallertau $30^{0/0}$ in the district of Jura $100^{0/0}$ in the district of Wurttemberg.

The rather speedy disposal of the hops crop 1955 did not leave much opportunity for the equalizing function of the Nürnberg Market. Demand was sometimes higher than supply and prices asked on the market were not geared to quotations submitted to breweries.

From the middle of December 1955 onward, a price bracket of DM 490.—/520.— for Hallertau hops in provisional packing remained more or less unaltered under a generally maintained tendency. Lack of supplies prevented greater oscillations on the market and sales were smaller than during the years before.

Brisk demand for hops crop 1955 resulted in a recuperation for hop prices in the European countries of production. It appears that breweries both at home and abroad purchased generally somewhat less than their necessities for one brewing year.

The scarcity of hops ready for baling during September 1955 as well as often drastic changes in the price situation made the acquisition of necessary stocks difficult for the trade. Inventories in hand were sometimes sold daily and offers had to be adjusted continually. German breweries in part refrained from purchase in view of the market's rising tendency and in the hope that prices would decrease later in the season. Such opinions, however, were refuted by the market's rapid development.

As in other countries so in Germany, too, the scarcity of hop pickers became more and more pronounced during the last two years. Considerable demand on the labour pool by all industries absorbs workers into permanent situations and the teams of pickers, formerly always available, did no longer appear. The cool and rainy weather during September 1955 did not only interrupt picking very often, but resulted individually in a decrease of efficiency.

Picking machines developed in England appear more suited to continental necessities than American installations. Mechanical hop picking has rapidly increased since 1947 and improvements were effected regarding both the cleanliness of picking and the protection of the cones.

Picking machines of the English type have been installed in Czechoslovakia during the last two years and their number is being continually increased. Especially in this country, it appears necessary to counterbalance by mechanical picking the scarcity of labour which already resulted in the use of children for harvesting.

In Germany, a first hop picking machine imported from England was tested on the hop farm Hoefter/Hallertau. Experiences with this machine have resulted in our introducing the mechanical harvest on our hop farm **Barthhof**, where the first hop picking machine constructed in Germany on an English licence is now being installed. Nürnberg Market

> Market Survey

Hop Picking

Mechanical Hop Picking The Finanzgericht München had decided that certain stages of preparation of hops would be subject to a turnover tax of 4%. An appeal against this has succeeded. The Bundesfinanzhof has ordered the question to be reopened at the Finanzgericht München, as the decision was based on a few expert opinions only which was considered defective evidence in this case. It is to be hoped that a favourable decision may now be reached.

Germ	lan
Hop	Exports
Crop	
Crub	12.3.3

 \sim

Export of German Hops Crop 1955									
	Septem	ber 1st, 1955	— March 31th, 1956						
Country	lbs.	lbs.	Country	lbs.	ibs.				
Belgium	661,380		b. f	4,409	9,869,771				
Denmark	557,764		Egypt	22,046	2,002,771				
Finland	128,087		Algiers	11,023					
France	954,812		Angola	11,023					
Greece	68,343		Congo	91,491					
Great Britain	153,881		British East Africa	52,910					
Iceland	1,102		French Morocco	50,926					
Italy	725,313		French West Africa	63,933					
Canary Islands	22,707		Goldcoast	8,818					
Luxembourg	123,898		Lybia	5,732					
Malta.	2,205		Moçambique	8,818					
Netherlands	544,977		Nigeria	11,023					
Norway , , , ,	246,033		Union of South Africa	8,818					
Austria	901,681		South West Africa .	5,952					
Portugal,	116,182		Tanganyika	2,205					
Saar	95,018		Tanger	6,173					
Spain	6,614		Tunisia	11,023					
Sweden	661,600		Africa		376,323				
Switzerland	419,756		•	000					
Europe		6,391,353	Burma	220 13,007					
Argentine	213,846	0,071,000	Cyprus Hongkong	7,055					
Brazil.	213,340		India	20,062					
Brit. West Indies	23,369		Indonesia	20,002 88,184					
Canada	33,289			3,086					
Chile	26,014		Iran	19,841					
Columbia	313,935		Israel.	35,274					
Costa Rica	5,071		Japan	257,938					
Ecuador	22,046		Korea	44,092					
Guatemala	4,409		Malayan States	24,251					
Honduras	9,921		Philippine Isl	31,526					
Mexico	11,023		Port. India	4,409					
Peru	44,533		Thailand	51,147					
Uruguay.	97,443		Viet-Nam	80,688					
U.S.A	2,302,705		Asia		680,780				
Venezuela	153,440			H JOY					
America	100,110	0 470 410	Australia	7,496					
•		3,478,418	French Pacific Isl.	2,205	9,701				
Ethiopia	4,409		Australia						
c. f	4,409	9,869,771	Total		10,936,575				

German Hop Imports Crop 1955 The following lots of hops were imported from September 1st, 1955 to March 31st, 1956:

Great Britai	n.				. 1,764 lbs.
Belgium .					
Yugoslavia					
Czechoslova	ikia				
U.S.A		•		•	54,895 "
Total				•	302,913 lbs.

The German hop acreage has been surveyed as customary during the month of May and the results for 1955 are shown in the following table:

Hop Acreage 1955

D	1939	1955						
Districts	Acreage acres	Existing acreage acres	Additional acreage acres	Total acres				
Hallertau Spalt Hersbruck Jura Tettnang *) Aischgrund/other distr.	11,317 2,276 2,118 200 200	$12,550 \\ 2,152 \\ 1,488 \\ 319 \\ 25 \\ 22$	$ \begin{array}{c} 217 \\ 34 \\ 17 \\ - \\ - \\ 3 \end{array} $	12,767 2,186 1,505 319 25 25				
Bavaria	16,111	16,556	271	16,827				
Wurttemberg/RHW. Tettnang **) Baden	1,223 1,636 440	549 1,646 86	15	549 1,661 86				
Baden-Wurttemberg	3,299	2,281	15	2,296				
Pfalz	151	71		71				
Rheinland-Pfalz	151	71		71				
Germany	19,561	18,908	286	19,194				

*) areas in Bavaria **) except areas in Bavaria

The effective acreage in 1955 was about 3.4% less than the official allotment of 19,877 acres. In this way, the acreage in Germany has now become smaller than during the last pre-war year 1939. Areas planted to hops in the Hallertau are now bigger than in 1939, and smaller expansions are to be noted in the districts of Tettnang and Jura. A shrinkage of acreage as against 1939 is shown for the districts of Hersbrucker Gebirge, Wurttemberg, Baden and Aischgrund and the districts of Pfalz and Spalt show somewhat smaller areas as well.

After a discussion with all circles concerned on October 18th, 1955, the Bundesministerium fuer Ernaehrung, Landwirtschaft und Forsten allotted the maximum acreage for 1956 as follows:

									16,980 acres
Baden-	₩u	rtte	mk	berg	ŗ		•		2,345 "
Rheinla	nd-	Pfa	lz	•	•	•	•	•	75 "
Total		•	٠		•		•	۰.	19,400 acres

It remains to be seen whether new plantings will expand the hop acreage up to the above total which still is lower than that of 1939.

The production of hops within the D.D.R. seems to have progressed during the last years. No data are available regarding acreage and yields, but the crop may be estimated at several thousand cwts. Hops are planted in the following locations: Dresden, Erfurt, Gera, Goerlitz, Halle, Jena, Leipzig and Magdeburg.

Demand for new hops crop 1955 within the D.D.R. has been covered to a considerable extent by contracts in France and Czechoslovakia. Only 1,700 cwts. of hops of the new crop 1955 have been purchased in Western Germany. At the same time, however, about 11,000 cwts. of Hallertau hops of the old crop 1954 were bought in November and December 1955.

According to an agreement with the D.D.R., the amount destined for hop purchases in Western Germany will now be published collectively. Orders by the State's Trading Institution, however, are to be effected only from case to case and according to the availability of funds.

Applications for export licences from Western Germany are subject to the balance of the compensation account. There were no difficulties for deliveries of hops during the season of 1955/56.

A total amount of DM 85,000,000.— for agricultural produce from Western Germany in 1956 has been agreed upon with the D.D.R. (*Bundesanzeiger* No. 243 of December 16th, 1955). Of this amount, DM 10,000,000.— have been set aside for hops (*Bundesanzeiger* No. 4 of January 6th, 1956). Acreage 1956

Deutsche Demokratische Republik (D.D.R.) Cool weather until June delayed the development of the hops. The stand of the gardens in mid-June was not uniform; on the average the plants had reached the height of the trellises. Aphids and Red Spider appeared only locally and were controlled. Downy Mildew, however, required special attention.

Heavy rainfalls in July under warmer weather benefitted the general stand of the crop. Bloom began about July 20 th. Changing but mostly rainy weather with often high temperatures made it difficult to tend the wet gardens and favoured **Downy Mildew**. On the average, only three sprayings had been effected in 1955 against this disease so that the spread of the infection which was favoured by weather conditions could not always be prevented. In such cases, even control measures from airplanes could not succeed and Downy Mildew spread out suddenly just before harvest. There remained only the possibility of harvesting the hops as speedily as possible in order to avoid damages.

Picking began sporadically on August 20th, was in full swing on August 25th, and about finished by mid-September, mostly under good weather conditions. There were not always sufficient pickers available. Crop 1955 showed relatively small cones which were sometimes off-colour. The aroma of the hops was excellent as always.

Usage of hops by breweries in Russia has increased to 78,000 cwts. in 1954 as against 48,000 cwts. in 1940. The hop acreage expanded 26.5% between 1950 and 1954. Average yields are indicated at 1,070 lbs./acre. Experiments with a new hop picking machine constructed in Moscow have been going on during the last two years.

The hop supply in Russia seems to be greater than demand. There have been offers on the world market for Russian hops crop 1955.

Experimental plantings of hops have been effected in this country after the Second World War. About 67 acres of hops have been planted in Aprilovo near Sofia and experiments are going on in Samokov. About 25 acres are said to be planted to hops in Eastern Bulgaria at Bjal Brjak and about 40 acres at Zavet. The most important area is in Prisovo (Central Bulgaria), comprising 77 acres. Average yields are indicated at 513 lbs./acre.

Hops had wintered well in the district of **Sanntal** (Slovenia). The weather was mild with little precipitation in January and February. Abundant snowfalls at the end of February/beginning of March resulted in welcome soil moisture. Precipitations were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
39.8	139.7	90.7	29.0	195.4	136.3	174.3	130.2	103.2	166.5	96.7	60.8 mm

Spring work was effected during the first half of April. The hops were off to a slow start as temperatures especially during nights remained too cool until May. Sufficient rains and warmer weather by the end of May favoured growth. Fleas were controlled in good time and did scarcely any damage.

Warm and sunshiny weather with welcome rainfalls in June benefitted the hops, whereas **Thunderstorms** and some **Hail** during that month hurt the hops locally. Damages by hail were experienced during the following months of July and August as well.

Extremely heavy rains in July and the beginning of August and hot summer weather until picking time favoured the development. Downy Mildew and Red Spider, however, had to be carefully controlled.

The plants had reached the height of the trellises during the first half of July and showed a good overhang in districts not affected by hail. Laterals were plentiful and the cones ripened even on the lower part of the vines. Picking began on August 17th/18th and was finished under good weather conditions at the beginning of September. The hops showed a good formation of the cones and better quality than the year before, but colour had been influenced more than normally by weather conditions and to some limited extent by Downy Mildew. Quality was estimated as 76% choice, 23% medium and 1% off-grade.

The total crop is centrally handled and had been purchased until the beginning of December 1955 so that at that time there remained no unsold hops on farms.

USSR

Yugoslavia

Bulgaria

The total crop of Yugoslavian hops is exported with the exception of about 4,000 cwts. which are required for the home breweries.

Farmers received somewhat higher payments as against the year before. Hops were classified into four grades and prices ranged from Dinar 11,500.— to Dinar 25,500.— per 50 kilos net.

There appear now in Yugoslavia some more modern trellis yards as against pole yards which up to now almost exclusively dominated hop gardens in this country.

Relatively short precipitation was experienced during the winter of 1954/55. Cool weather Belgium during the spring with snowcover until March delayed the development of the hops. Precipitations were as follows:

Area	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Poperinghe	54	71	26	7	70	58	12	50	75	50	20	51 mm
Alost	70	75	28	18	74	54	18	55	89	49	39	65 mm

The weather was cool with limited rains in March and April. Temperatures were still too low in May, but timely heavy rains brought welcome humidity. Preventive sprayings were effected against **Downy Mildew** as well as parasites which, however, were no danger.

Growth was better in June and the plants reached the height of the trellises in mid-July. Warmer weather from this date on with plenty of sunshine favoured the vegetation as well as the development of laterals. The Formacion of the Cones benefitted by warm and sunshiny weather during August.

Picking started during the first days of September and was finished within about three weeks under generally good weather conditions. There were sufficient pickers available. The hops showed cones of somewhat smaller size than the year before and had well ripened. The quality was better than in 1954 and had an especially good brewing value. The crop was estimated as 70% choice, 25% medium and 5% off-grade.

The Belgian crop was quickly sold. At the beginning of October there were already in second hands 90 % in Alost and 50 % in Poperinghe. The districts of production were sold out with the exception of small remaining lots at the beginning of January 1956. Prices for Replant Hallertau, which constitute the bulk of the Belgian hops, set in with bfrs. 2600.— at the beginning of September, increased to bfrs. 3500.— at the beginning of October and reached bfrs. 4000. until the end of December 1955. Fuggles, which are now only a small percentage of the crop, were sold on about the same basis, whereas other qualities, especially Replant Saaz, Replant Tettnang and Northern Brewer were quickly sold at about bfrs. 4000.—/4200.—.

The following quantities of hops crop 1955 have been imported from September 1st, 1955, until February 29th, 1956:

Ibs. Western Germany 159,044 U. S. A. 149,251 France 29,542 Poland 59,524 c. f. 997,361	b. f	lbs. 997,361 125,221 1,076,065 300,487 2,499,134
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Exports from September 1st, 1955, until February 29th, 1956, are shown as follows:

	lbs.		lbs,
Western Germany	77,381	b.f	376,103
Austria	73,854	Paraguay	15,432
Saudi-Arabia	220	Moçambique	2,205
Belgian Congo	69,004	Netherlands .	51,367
Denmark	18,739	England	50,044
U.S.A	83,334	Sudan	661
Malayan States	882	Sweden	11,464
Eastern Pakistan		Switzerland	12,566
India		Kenya-Uganda ,	3,748
Brazil	49,603	Union of South Africa	12,787
c. f	376,103		536,377

In the **Alsace**, the weather was cold and dry during the spring of 1955. Uncovering and **Cutting** of the hops started only in mid-April. The month of May was still too cold and growth was favoured by warmer temperatures only at the end of that month.

1954	1955
Sept. Oct. Nov. De	Jan. Febr. March April May June July Aug. Sept.
118.3 68.3 44 83.	104.4 46.6 29.6 23.1 76.1 91.2 118.5 55.6 45.3 mm

Downy Mildew appeared only sporadically and was under control, whereas parasites were notably absent. Cooler weather during the first half of June was followed by higher temperatures in the second half of that month. The plants reached the height of the trellises by the end of June on the average. Welcome rains and warmer weather in July improved the development of the hops. The gardens showed a good aspect generally, even if the stand was sometimes a little thin and the overhang was not always quite satisfactory. First Burrs appeared in mid-July, and the hops were in full Bloom by the end of July. The Formation of the Cones was favoured by warm summer weather in mid-August.

Harvest began on September 5th and was finished within three weeks under warm and dry weather. Lack of labour was sometimes evident, especially as pickers from Germany were less available than in former years.

The Alsacian crop changed rapidly into second hands and was sold by the end of September. About 50 % had been purchased each by the cooperative and traders. Prices began at abt. ffrs. 25,000.— and increased rapidly to ffrs. 27,000.—. Some last lots changed hands at ffrs. 30,000.— under rapid trading at the close of the season. Traders had to agree to additional payments for purchases effected at the beginning of the harvest.

In **Flanders**, the hops were off to a slow start. Sprayings against **Downy Mildew** were effected up to twenty times. The hops reached the height of the trellises only at the beginning of August and the general aspect of the gardens was not so good as in other years. Picking began as usual on the first Monday in September and was finished within three weeks under good weather conditions. The hops showed a good colour with cones somewhat smaller and quality better than the year before. The crop was estimated as 55% choice, 30% medium and 15% off-grade. Prices fluctuated until December 1955 between ffrs. 20,000.— and ffrs. 25,000.— per 50 kilos. About 85% of the crop was sold by the end of 1955. Last remaining lots changed hands until the beginning of March at somewhat higher prices. There were about 350 cwts. of hops not sold at that date.

The acreage is somewhat smaller than the year before. About two thirds of the gardens are planted to Replant Hallertau, whereas production of Fuggles is on the downgrade.

Destination	Jan. — June Ibs.	July — Dec. Ibs.	1955 Total Ibs
Western Germany		1,102	1,102
Austria	28,219	21,826	50,045
Denmark	4,850	74,956	79,806
Spain	2,646	·	2,646
Hungary	88,184		88,184
Italy	1,102		1,102
Netherlands	4,850		4,850
Sweden		1,102	1,102
Switzerland	441	220	661
Czechoslovakia		23,148	23,148
Belgium-Luxembourg	36,155	49,383	85,538
Deutsche Demokratische Republik	399,914	153,220	553,134
Indonesia	2,866	·	2,866
Argentine	110,230		110,230
Brazil	. 72,972		72,972
Equatorial Africa	4,409		4,409
French West Africa	7,496		7,496
Algiers	74,075	44,753	118,828
French Cameroon	13,448	_	13,448
Cambodscha, Laos	33,730		33,730
French Morocco.	3,307	2,205	5,512
Martinique	1,102		1,102
Tunisia	-	4,409	4,409
Spanish Poss. in Africa	4,409	2,205	6,614
Vietnam		441	441
Total	894,405	378,970	1,273,375

French hop exports for the calendar year 1955 were as follows:

- 14 -

In comparison France imported the following quantities during the calendar year 1955:

	Coı	int r	ies		and the second second	 	 	Jan.—June lbs.	July—Dec. lbs.	1955 Total lbs.
Western Germany Czechoslovakia Yugoslavia	+			•	•			1,019,407 15,432 	111,332 84,877 32,849 229,058	$1,130,739 \\ 100,309 \\ 32,849 \\ \hline 1,263,897 \\ \hline $

In the district of **Muchlviertel**, the growth of the hops was subject to the influence of a cold spring and rainy summer. Aphids appeared and sprayings against Downy Mildew were effected ten to eleven times on the average. The hops reached the height of the trellises in mid-July and showed a good overhang. Picking began on August 29th and was finished in mid-September under generally good weather conditions. The hops showed somewhat less uniform cones than the year before, whereas colour and quality were in part better than in 1954 in spite of the more unfavourable weather. The quality was estimated as $50^{\circ}/_{\circ}$ choice, $40^{\circ}/_{\circ}$ medium and $10^{\circ}/_{\circ}$ off-grade. A total crop of 33,000 lbs. was harvested on an area of 40 acres (3 acres new gardens) which corresponds to a yield of 825 lbs. per acre. All hops are under contract to the Brewers' Union of Austria.

In **Styria**, the acreage was increased about $30^{0/0}$ and 26,455 lbs. have been harvested on 29 acres (912 lbs./acre).

Precipitations in Switzerland were distributed as follows in 1955:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
115	107	35	27	83	123	142	88	68	25	10	91 mm

Sprayings against **Downy Mildew** were effected six times. The hops reached the height of the trellises at the beginning of July and showed a normal overhang. The lower third of the vines, however, produced less hops than customary. **Picking** proceeded from August 26th to September 17th under generally good weather conditions. There is a lack of labour even in Switzer-land.

The quality of the harvested hops was good. Cones were somewhat smaller in size than in 1954, but heavier in growth. The quality was estimated as $65^{\circ}/_{\circ}$ choice, $33.5^{\circ}/_{\circ}$ medium and only $1.5^{\circ}/_{\circ}$ off-grade. 26,235 lbs. were produced on 17 acres. The whole crop has been purchased by sponsoring breweries. Prices were as follows:

Quality	I	sfrs.	430.—
,,			400
**	Ш	,,	350.—

Dry weather in Sweden decreased yield against 1954. The hops reached the height of the trellises at the beginning of July but showed only a pointed stand. The harvest was effected between August 20th and mid-September under sometimes rainy weather. The hops were of good quality and colour and showed better formed cones than the year before. The crop was estimated as $98^{\circ}/_{\circ}$ choice and only $2^{\circ}/_{\circ}$ medium. The total crop of 12,125 lbs. from an area of 15 acres was purchased as usual by sponsoring breweries.

The hop area in Spain has been increased and is now 835 acres. The following quantities have been picked:

Galicia									291,117 lbs.
									299,054 "
									41,777 "
Vascon	gao	las	-Na	ava	rra			•	9,921 "
Total		•	•	•	•				641,869 lbs.
TOTAL		•	•	•	•	•	•	•	041,009 lbs.

The crop was better than in 1954 and has been classified as follows: $82.6^{\circ}/_{\circ}$ choice, $16.2^{\circ}/_{\circ}$ medium and only $1.2^{\circ}/_{\circ}$ off-grade. Favourable weather and abundant sunshine contributed to a better quality of the crop as against 1954. The dryness during the last weeks before harvest, however, reduced the crop by an estimated $10^{\circ}/_{\circ}$.

On the basis of good results obtained with Hallertau and Tettnang plants up to now, further increases of acreage are as far as possible to be effected by plantings of these varieties. The substitution of Golding vines by the above hops is under consideration.

The entire Spanish crop is under contract to the Spanish breweries.

Austria

Switzerland

Sweden

Spain

Cold weather with sometimes abundant rainfalls until the end of May retarded growth. Welcome warmer weather began in June and the hops could improve their stand. For the rest, the weather in 1955 was very favourable for the hops. The summer was very warm with sufficient rainfalls. Downy Mildew was scarcely noticeable and an attack of Aphids shortly before harvest was controlled. Picking began during the last week of August and was finished within four weeks under warm and dry weather. As machine picking is already widespread in England, sufficient labour was available for hand picking in almost all districts.

The quality of crop 1955 was remarkably better than the year before. The hops were more uniform than in 1954 and sufficiently ripened. Goldings and Golding varieties (abt. $25^{\circ}/_{\circ}$ of the crop) were estimated as $425^{\circ}/_{\circ}$ choice, $46^{\circ}/_{\circ}$ medium and $11.5^{\circ}/_{\circ}$ off-grade, whereas Fuggles (abt. $70^{\circ}/_{\circ}$ of the crop) were good in aroma and lupulin, too, and graded as $22^{\circ}/_{\circ}$ choice, $74^{\circ}/_{\circ}$ medium and 4% off-grade.

Part of the 1955 crop remained unpicked on the vines, as yields were higher than the quota of production of 95%. The average price to farmers was fixed at \pounds 27.8.— per cwt.

About 3,600 cwts. hops crop 1955 which could not find a destination for brewing are to be used for manure. No unsold stocks, therefore, will be carried over into the coming season 1956/57.

Country	ewts.	5 — April 30th, 1956 Country	cwts.
Country	ewts.	Country	CWLS,
Australia	11,366	b.f	43,379
Belgium	1,610	Malaya	6
Burma	56	Malta and Gozo	175
Canada	· 499	Netherlands	158
Ceylon	81	Rhodesia and Nyassa	629
Denmark	54	Pakistan	10
Western Germany	28	Pacific Islands	4
Fiji-Islands	17	Singapore	900
Finland	59	Union of South Africa	559
Indonesia	59	Sweden	10
Iraq	81	Switzerland	4
Eire	28,663	Tanganyika	1.01
Jamaica	20		
Channel Islands	278	Total	45,935
Kenya	508		

The following demand has been registered for crop 1956: Home consumption 207,980 cwts. (1955: 204,528 cwts.) Export 5,386 ,, (1955: 13,058 ,,)

U.S.A.

Sacramento. Precipitations during April and May 1955 were higher than usual in this district and, together with high temperatures resulted in an infestation of **Downy Mildew** in several localities. Farmers occasionally sprayed against this disease, but most of them only cut back the infected shoots, sometimes more than once. This resulted in a reduction of yields. **Red Spider** was effectively controlled by sprayings. Precipitations were as follows:

Γ	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	3.14	1.33	0.37	2.75	0.67	0.01			0.95	0.57	1.16	12.20 inch.

The hops reached the height of the trellises during the first half of June and showed a good overhang. Harvest started some days later than usual, was in full swing on August 10th and

finished generally at the beginning of September under good weather conditions. The quality of the crop was unchanged against the year before and graded as follows: 80% choice, 20% medium.

Western Oregon. Cold weather during the spring and adverse growing conditions during the first months of the season retarded development. Precipitations were as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2.63	2.25	3.66	5.18	1.18	1.09	0.86		2.30	7.78	6.75	12.22 inch.

Downy Mildew did not appear on Fuggles and English varieties, whereas Clusters had to be sprayed up to six times. The hops reached the height of the trellises by the end of June. Picking began on August 20th. The harvest of Fuggles hops was finished on August 31st, whereas picking of other varieties extended until mid-September. The weather during picking time was good. The quality was unchanged against the year before and estimated as 50% choice, 30% medium, 20% off-grade.

Eastern Oregon and **Idaho.** The weather during the season 1955 was cooler than normal. Aphids and Red Spider were easily controlled with available sprayings so that no damages resulted. Precipitations in Idaho were as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0.99	0.56	0.74	3.34	1.72	0.82	0.77		0.46	1.19	1.81	2.17 inch.

Downy Mildew did not appear in these districts. The plants reached the height of the trellises at the beginning of July and showed a good overhang. The ripening of the cones on the lower parts of the vines was sometimes not so good as expected. Harvest began on August 25th and was finished about September 23rd under good weather conditions. The quality of the crop in Idaho was estimated as follows: $90^{\circ}/_{\circ}$ choice, $10^{\circ}/_{\circ}$ medium.

Washington. Weather conditions in the district of Yakima in 1955 were not favourable for hops. The spring was cold and the weather remained cool until mid-June which hampered growth. Downy Mildew appeared locally and was controlled with one or two sprayings. Red Spider necessitated special attention at the close of the growing season. Precipitations were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0.58	0.25	0.69	1.41	0.41	0.41	0.43	—	0.48	1.24	2.57	3.22 inch.

The hops reached the height of the trellises by the end of June and showed a good overhang. Picking began on August 24th and was finished during the last week of September under good weather. Crop 1955 reflected the attack of **Red Spider** both in colour and quality and has been graded as follows: $20^{\circ}/_{\circ}$ choice, $70^{\circ}/_{\circ}$ medium, $10^{\circ}/_{\circ}$ off-grade.

Labour is no problem in the U.S.A. as picking is almost completely mechanized.

Hop Imports U.S. A September 1st, 1955 — Fe	•	
Country	US-Pounds	Ztr. je 50 kg
Belgium/Luxembourg Western Germany Yugoslavia	38,423 1,132,368 1,026,279 2,637	349 10,273 9,310 24
Total	2.199.707	19.956

Hop Imports U.S.A. Hop Exports U.S.A.

Exports of US-Hops Crop 1955

September 1st, 1955 --- February 29th, 1956

Septe	mber 131, 1999	- rebruary 25th, 1950	
Country	lbs.	Country	lbs.
Ethiopia	$\begin{array}{r} 9,001\\ 2,205\\ 259,998\\ 135,587\\ 68,437\\ 6,608\\ 121,190\\ 13,400\\ 1,183,780\\ 3,000\\ 552,169\\ 1,028,883\\ 17,637\\ 255,989\\ 93,861\\ 88,102\\ 30,817\\ 33,671\\ 31,100\\ 211,050\end{array}$	b. f Jamaica	$\begin{array}{r} 4,146,485\\ 15,511\\ 2,261,286\\ 15,699\\ 4,869\\ 47,426\\ 22,045\\ 11,024\\ 60,786\\ 179,104\\ 10,075\\ 33,573\\ 165,150\\ 11,023\\ 224,675\\ 4,409\\ 80,438\\ 184,909\\ 88,532\\ 165,860\\ \end{array}$
c.f	4,146,485		7,732,879

Japan

Hops could develop satisfactorily after a mild winter and warm spring, although precipitations in the springtime were sometimes smaller than expected. As a consequence of weather conditions, the hops suffered less from diseases and more from parasites. Some damages by **Red Spider** were experienced. Sprayings against **Downy Mildew** were effected up to ten times. Precipitations were distributed as follows:

J	an. Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Yamagata 8	4.9 83.2	54.0	48.1	133.8	111.9	88.6	96.0	106.6	151.0	52.9	126.3 mm
Fukushima 20	6.4 180.3	132.1	49.8	152.5	109.0	86.6	64.6	123.0	175.9	33.2	87.0 mm
Yamanashi 4	1.8 74.6	126.0	40.8	98.7	63.4	119.2	176.7	142.5	258.8	87.9	18.6 mm

The plants reached the height of the trellises by mid-June and were overhanging at the beginning of July. Picking began one week earlier than normal about the middle of August and was favoured by good weather.

The harvested hops were of good quality and colour. The cones were generally of smaller size than usual. The crop was graded as follows: $74.7^{\circ}/_{\circ}$ choice, $17^{\circ}/_{\circ}$ medium, $8.3^{\circ}/_{\circ}$ off-grade. The hops have been purchased by sponsoring breweries until the end of September 1955 on the following basis:

Choice	Yen	383,—	per	kilo	(\$ 1.06)
Medium		338,—		,,	
Off-grade	,,	292,—	,,	,,	(\$ 0.81)

Union of South-Africa In contrast to the year before, growth of the hops during the whole <u>Season 1954/55</u> proceeded under favourable weather conditions with the exception of abundant rainfalls in August 1954.

	1954									1955	
Ma	y June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Febr.	March	April
4.9	94 1.42	2.11	10.21	1.09	2.22	5.64	1.90	4.69	7.61	1.05	1.56 inch.

Sprayings were effected against Caterpillars which, however, did not appear so numerous as the year before. It was not necessary to control Downy Mildew.

The plants reached the height of the trellises by mid-December and formed a good overhang. The cones did not ripen quite well on the lower part of the vines.

Picking began on February 7th, 1955, and was finished under rainy weather only on March 25th. A record crop was harvested. The cones showed a good formation and the hops were of good colour. The quality was estimated as 60% choice, 30% medium, 10% off-grade.

Certain quantities of hops crop 1955 have been shipped to British East Africa, but there remained still 400 cwts. of this harvest unsold.

Crop 1956

Growth of the hops during the **Season 1955/56** was influenced by a late, cold spring and hot, dry weather in December 1955. Precipitations were distributed as follows:

1955	1956
May June July Aug. Sept. Oct. Nov. Dec.	Jan. Febr. March April
1.99 1.74 1.44 1.01 1.81 3.39 4.73 0.54	2.53 2.50 3.72 2.02 inch.

The development of the hops until harvest was about a fortnight late. The plants reached the height of the trellises by the end of December and showed some overhang. The hops on the lower parts of the vines were ripe. Picking was extended from February 20th to March 28th, 1956, and suffered from occasional rains and a serious lack of labour.

The colour of the hops was influenced by weather conditions during harvest. The cones were well closed and showed a good content of lupulin. The quality was estimated as follows: 40% choice, 50% medium, 10% off-grade.

All hops crop 1956 are expected to be sold.

In the districts of **Rio Negro** and **Dionisia**, the growth of the hops suffered from constant high winds especially during the months of December 1955 and January 1956. The crop in these districts was smaller than the year before.

In contrast, the district of **Sierra de la Ventana** brought a bigger crop than in 1954, although climatic conditions were the same.

The crop in the Argentine was picked in March 1956 and brought a total of 147,709 lbs.

A severe cold wave developed by the end of January 1956. The earth was deeply frozen and the snow cover remained until March.

Hallertau. Spring work started only at the beginning of April and was finished about a fortnight later than normal. The plants had locally suffered from frost, but started new shoots from the lower parts of the rootstock. Warmer weather benefitted the growth of the hops only at the beginning of May, and temperatures fell off again during the middle of that month.

Downy Mildew had to be controlled at an early time. Warm weather at the end of May/beginning of June favoured the development of the hops.

Spalt. The uncovering of the hops started during the second week of April and was retarded by inclement weather. Warmer weather at the beginning of May was welcome for the development of the gardens. Fleas had to be controlled locally. Unfavourable weather during the middle of May was followed by warmer temperatures at the end of that month which resulted in a good growth of the plants.

Tettnang. In this district, too, spring work was delayed and the hops were off to a slow start under adverse weather conditions. Warmer weather during the first half of May favoured especially early uncovered gardens. Sufficient rainfalls benefitted the hops during the second half of May. Growth 1956 in Germany

Union of South Africa

Argentine

Hersbrucker Gebirge. Uncovering of the hops began at the end of March and was finished within about three weeks. Spring work was hampered by weather conditions. Early varieties had generally wintered well whereas late varieties showed some missing hills. Growth during April was retarded by cool weather but benefitted by warmer temperatures at the beginning of May. Precipitations in mid-May were welcome, even if temperatures were down as a consequence. Under changing weather at the end of May/beginning of June the hop gardens showed a favourable development.

Wurttemberg. The gardens had generally wintered well with the exception of some damages among late varieties. After a late uncovering and cutting of the hops, the plants could show a better growth under warmer weather only at the beginning of May although nights were still too cool even then. Rainfalls and higher temperatures during the second half of May resulted in a good development of the hops.

Hop gardens showed a healthy and vigorous aspect by the first half of June 1956. Delays of growth during springtime had already been set off to a good proportion. Downy Mildew and parasites were carefully controlled. It was noticeable that in general hop gardens were better manured than the year before.

It seems advisable to indicate that harvest results of crop 1956 can be discussed only after picking has been finished. The continuing lack of labour leads to serious doubts whether sufficient pickers will be available for the coming harvest.

JOH. BARTH & SOHN

The compilation of this report has been made possible in many instances by data supplied from observers in many countries, which is hereby gratefully acknowledged.