

Joh. Barth & Sohn

HOPS SINCE 1794

HOP FARM BARTHOF HALLERTAU

TELETYPE 06/22030
CABLE ADDRESS:
BARTHSONN NURNBERG

NÜRNBERG 2

P. O. B. 331
TELEPHONE 44 45 51 / 53

August 15th, 1962

HOP REPORT 1961/62

During the past year, productivity and services have continued to develop within the Western hemisphere. Growth in Europe tended to become slower, whereas a recession in the USA and Canada could be overcome.

**Economical
Situation**

The E. E. C. (European Economic Community) entered into its second phase of development on January 1st, 1962. Expectations for one single great European Common Market have been increased by the fact that various countries, especially Great Britain indicated their intention to join the E. E. C.

Economical progress within the Federal Republic of Germany was limited by the scarcity of labour. The increase of wages was greater than the growth of productivity and this tends to accentuate the difficulties of the German position on the world market.

World production of beer in 1961 shows an **increase** of about **16.2 Million bbl.** against 1960. The percentage rates of increase are as follows: Western Europe +6.7%, Eastern Europe +3.2%, North America +0.9%, Central and South America +2.7%, Africa +7.3%, Asia +25.4%, Australia and Oceania +2.0%.

**Production
of Beer**

1 ha = 2.934 bayr. Tagwerk	1 bayr. Tagwerk = 0.341 ha
1 ha = 2.471 acres	1 acre = 0.405 ha
1 Liter = 0.2642 gall. (USA.)	1 gall. (USA.) = 3.7853 Liter
0.2201 gall. (Brit.)	1 gall. (Brit.) = 4.5435 Liter
1 hl = 100 Liter = 26.42 gall. = 0.8523 bbl. (USA.)	1 bbl. (USA.) = 31 gall. = 1.1734 hl
22.01 gall. = 0.6114 bbl. (Brit.)	1 bbl. (Brit.) = 36 gall. = 1.6356 hl
1 kg = 2.20462 lbs.	1 lb. = 0.45359 kg
1 shortton (sht) = 2000 lbs. = 907.185 kg	
1 longton (lgt) = 2240 lbs. = 1,016.048 kg	
1 metr. Tonne = 20 Ztr. = 1000 kg = 1.10231 shorttons = 0.98419 longtons	
1 Ztr. = 50 kg = 110.23 lbs. = 1.102 cwt. (USA.)	1 cwt. (USA.) = 100 lbs. = 45.36 kg = 0.9072 Ztr.
0.984 cwt. (Brit.)	1 cwt. (Brit.) = 112 lbs. = 50.8 kg = 1.016 Ztr.
1 quarter (qr) = 400 lbs. = 181.44 kg (barley)	1 Ztr. = 0.27555 qr.
1 bushel (bu) = 48 lbs. = 21.77 kg (barley, malt)	1 Ztr. = 2.2965 bu.
56 lbs. = 25.4 kg (corn, milocorn)	1 Ztr. = 1.9685 bu.
DM 1.— = US\$ —.25 / DM 4.— = US\$ 1.— / US\$ 2.80 = DM 11.20 = £ 1.—	
1 mm precipitations = 1 Ltr. of water per m ² , 1 mm = 0.04", 1" = 25 mm.	

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Production of Beer 1961			
Country	1000 bbl. of 31 gall. each	Country	1000 bbl. of 31 gall. each
Germany W. 49,656		b. f.	342,515
East *) 15,340	64,996	Congo/Ruanda-Urundi	1,507
England	38,669	Algiers	1,108
USSR *)	22,158	Un. of South Africa *)	724
France	15,471	Rhodesia *)	469
Czechoslovakia	12,708	British East Africa	343
Belgium	11,803	Morocco	268
Poland	6,020	Ivory Coast	213
Austria	4,859	Cameroons	205
Denmark	3,856	Nigeria	197
Spain *)	3,665	Angola	119
Netherlands	3,240	Egypt	119
Hungary	3,196	Senegal	98
Switzerland	3,136	Ghana *)	85
Ireland *)	2,898	Tunis	85
Italy	2,626	Moçambique	80
Sweden	1,808	Sudan *)	68
Jugoslavia	1,584	Ethiopia *)	61
Roumania *)	1,364	South West Africa	47
Finland	960	Dahomey	43
Bulgaria *)	937	Centraf. Rep.	34
Norway	800	Rep. Congo (Brazzav.)	18
Greece	392	Guinea	17
Luxembourg	372	Madagascar	17
Portugal *)	323	Africa	5,925
Malta *)	27	Japan	10,594
Iceland	13	Philippine Islands	920
Europe	207,881	Vietnam	469
U.S.A.	95,027	China *)	426
Canada	10,258	Singapore	293
Mexico	7,076	Turkey	268
Brazil *)	6,818	Indonesia	179
Columbia	5,823	Israel *)	153
Venezuela	2,131	Hongkong	115
Argentina	1,900	South-Korea	110
Peru	1,191	India	90
Cuba	1,162	Formosa *)	65
Chile	1,047	Iran *)	60
Uruguay *)	537	Thailand	59
Ecuador	403	Ceylon	46
Panama	201	Iraq	37
Bolivia *)	166	Cyprus	37
El Salvador	160	Lebanon	35
Jamaica	152	Syria	17
Guatemala *)	140	Pakistan	13
Honduras	112	Asia	13,986
Costa Rica *)	85	Australia	9,361
Dominican Republic*)	80	New Zealand	2,129
Trinidad	67	Tahiti	13
Paraguay	43	New Caledonia	4
Nicaragua	38	Australia/Oceania	11,507
Martinique	17	Total	373,933
America	134,634	*) estimate	
c. f.	342,515		

**Beer Output
in Western
Germany**

Output of beer in Western Germany during the calendar year 1961 amounted to 48,160,673 bbl.
 Production of beer in the Western sector of Berlin for the same period was 1,495,012 bbl.
 Total 49,655,685 bbl.

These figures include 74,755 bbl. delivered tax-free to the occupation forces (1960 = 29,146 bbl.) as well as exports and other sales against foreign currency totalling 1,032,655 bbl. (1960 = 1,039,302 bbl.).

Crop 1960 (Supplement)

Complete figures of imports and exports of hops crop 1960 during the period from September 1st, 1960, to August 31st, 1961, can now be stated as follows:

	Import	Export
Germany	4,543,901 lbs	11,497,870 lbs
Belgium	2,737,011 lbs	621,036 lbs
England	1,063,168 lbs	1,827,283 lbs
U.S.A.	5,405,018 lbs	17,439,929 lbs

The world crop 1960 has been taken over almost completely by breweries at partly considerably decreased prices.

Assistance to farmers was obtained when long drawn out discussions between the German Federal Government, the State of Bavaria and the Union of Hop Growers came to a conclusion in mid-August 1961. The G.H.V.Z. (*Genossenschaftliche Hopfen-Verwertungs-Zentrale*) obtained a loan amounting to DM 1,500,000.— free of interest from the *Bayerische Staatsministerium für Ernährung, Landwirtschaft und Forsten* in order to purchase unsold stocks of hops crop 1960 on farms. Farmers received a payment of DM 100.— per 50 kilos. Furthermore, the expenses for kilning and packing of the hops had to be paid. These old hops should have been sealed according to law until July 31st, 1961. In this case, the sealing of the hops was allowed exceptionally after that date. Hops were accepted beginning August 25th, 1961, and the action was finished at the beginning of September. A total quantity of about 5,000 cwts. was delivered (including 4,115 cwts. of Hallertau hops) of which a quantity of 1,400 cwts. remained unsold in April 1962.

According to the conditions of the loan, eventual losses would be borne by the State of Bavaria (90%) and the G.H.V.Z. (10%). As prices increased during the season 1961/62, it can be expected that the entire transaction will be terminated without deficit. Any balances over and above the outlay will be distributed to farmers.

**Unsold hops
crop 1960
in Germany**

Crop 1961

Hop yards came well through the mild winter 1960/61. The **Uncovering** and **Cutting** was favoured by good weather already in February 1961. The plants grew vigorous shoots and showed a good growth until April. The development at that time was in advance of normal years.

From that time on, however, 1961 turned into an unfavourable hop year. Cool and wet weather prevailing well into June 1961 brought the development of the plants practically to a stop, especially in hop yards on heavy soils and in valley locations. **Downy Mildew** had to be controlled very carefully and this work was often hampered by waterlogged yards and rainfall. Short periods of warmer weather were always followed by unfavourable growing conditions so that the hops could not develop uniformly. The vines reached the height of the trellises but showed little or no overhang and laterals were often missing especially in the lower part of the plants. **Bloom** and **Formation** of the **Cones** were not especially favoured by weather conditions. The hops had, however, relatively less foliage than in former years and the **Ripening** of the hops, which was somewhat retarded, was favoured by hot summer weather during the end of August and the harvest in September 1961.

**Growth of the
Hops Crop 1961
in Germany**

Weather data from the Experimental Hop Farm Hüll/Hallertau							
1961	March	April	May	June	July	August	Sept.
Precipitations per month (mm)	40	65	137	119	50	92	62
Monthly average of air temperature °Celsius	5.0	10.8	10.1	15.7	15.1	15.6	15.3
Maxima of air temperature °Celsius	19.4	24.6	24.1	29.7	31.1	31.0	28.6
Minima of air temperature °Celsius	—3.3	0.1	0.1	4.6	2.1	5.1	2.7
Monthly average of relative air humidity %	79	81	82	78	78	80	82
Other data:							
Snowfall	4 days	—	—	—	—	—	—
Rain and snow	2 days	—	—	—	—	—	—
Thunderstorm	—	5 days	3 days	5 days	—	1 day	4 days
Storm	—	—	—	1 day	—	—	—
Hoarfrost	11 days	1 day	2 days	—	—	—	—

Acreage, Yield and Production 1960 and 1961

	Acreage 1960 Acres	Yield Pounds per acre	Production 1960 Pounds	Acreage 1961 Acres	Yield Pounds per acre	Production 1961 Pounds
Hallertau	14,344	1,823	26,149,532	14,188	1,470	20,856,508
Spalt	2,258	1,469	3,317,703	2,234	1,149	2,566,044
Hersbruck	1,376	1,528	2,101,976	1,245	876	1,090,836
Jura	440	1,603	705,362	415	1,245	516,648
Bavaria	18,418	1,752	32,274,573	18,082	1,384	25,030,036
Tettang	1,821	1,587	2,889,239	1,769	1,489	2,634,387
R.H.W.	376	1,152	433,094	274	1,136	311,400
Baden	74	1,557	115,190	64	1,299	83,113
Rheinpfalz	62	1,442	89,397	54	1,298	70,106
Germany West	20,751	1,725	35,801,493	20,243	1,390	28,129,042**)
Germany East	3,534	749	2,645,520	4,942	436	2,153,674
Saaz (Zatec)	15,889	750	11,922,477			
Auscha (Ustek)	3,707	965	3,575,861			
Other Districts	667	892	595,242			
Czechoslovakia	20,263	794	16,093,580	20,581	630	12,964,371
Alsace	2,965	1,379	4,089,533	2,718	1,334	3,626,567
Dep. Côte d'Or	321	858	275,575	235	797	187,391
Northern France	526	1,572	826,725	445	867	385,805
Lorraine	37	1,490	55,115	37	1,192	44,092
France	3,849	1,363	5,246,948	3,435	1,235	4,243,855
Alost	828	1,611	1,333,783	717	1,153	826,725
Poperinghe	1,495	1,355	2,025,476	1,236	1,249	1,543,220
Vodelée	49	1,350	66,138	49	900	44,092
Belgium	2,372	1,444	3,425,397	2,002	1,206	2,414,037
Slovenia	5,923	1,511	8,950,676	5,696	1,202	6,848,810
Backa	3,583	1,176	4,212,991	3,464	1,020	3,533,974
Jugoslavia	9,506	1,385	13,163,667	9,160	1,133	10,382,784
Austria	247	1,273	314,376	247	1,227	303,133
Galicia	563	427	240,632	605	481	291,228
León	1,295	422	546,520	1,364	610	832,347
Asturias	200	450	89,948	294	417	122,686
Vasco Navarra	15	375	5,622	15	272	4,079
Spain	2,073	426	882,722	2,278	549	1,250,340
Switzerland	22	1,453	31,967	25	1,102	27,558
Roumania	1,236	713	881,840*)	1,236	713	881,840*)
Bulgaria				2,224	446	992,070*)
Hungary	1,663	225	374,782*)	1,730	561	970,024*)
Poland	5,612	623	3,494,291	5,802	753	4,367,313
USSR	29,652	446	13,227,600*)	29,652	446	13,227,600*)
Continent	100,780	948	95,584,183	103,557	795	82,307,641
Kent	11,090	1,390	15,416,547	10,835	1,147	12,431,519
Hants	588	1,423	836,976	578	1,429	826,064
Surrey	114	1,270	144,732	119	1,164	138,559
Sussex	1,856	1,473	2,733,704	1,759	1,118	1,967,385
Hereford	4,379	1,332	5,834,474	4,339	1,162	5,042,471
Worcester	2,021	1,362	2,752,553	1,994	1,198	2,388,684
Other Counties	52	1,488	77,381	54	1,596	86,200
England	20,100	1,383	27,796,367	19,878	1,163	22,880,882
Europe	120,880	1,021	123,380,550	123,235	854	105,188,523
Washington	16,400	1,620	26,567,965	12,800	1,570	20,096,031
Oregon	4,500	1,310	5,894,990	3,000	1,430	4,290,041
California	5,100	1,470	7,496,963	3,899	1,435	5,596,046
Idaho	3,200	1,880	6,016,023	3,200	1,710	5,472,038
U.S.A.	29,200	1,575	45,975,941	22,899	1,548	35,454,157
Canada	848	1,399	1,186,075	848	1,350	1,144,959
Victoria	450	1,564	703,708	457	1,700	776,901
Tasmania	1,448	1,934	2,799,952	1,413	1,995	2,819,132
Australia	1,898	1,846	3,503,660	1,870	1,923	3,596,033
New Zealand	591	1,520	898,595	581	1,429	830,142
Japan	2,244	1,524	3,419,886	2,461	1,411	3,471,363
Manchuria	247	402	99,207*)	247	402	99,207*)
Northern-Korea	1,236	161	198,414	1,236	143	176,368*)
Argentine	630	673	423,724	630	525	330,690*)
South Africa	264	832	219,578	264	835	220,460*)
Total	158,038	1,135	179,305,630	154,271	976	150,511,902

*) Estimate

**) Official Weight May 3rd 1962.

The hops of crop 1961 had well formed cones of medium size. The hops were of good green colour but showed sometimes signs of **Discolouration** as well as **Wind Whipping**. Generally, there was ample lupulin of good aroma and light colour present. Regarding picking, the influence of the automatic harvest was to be noted.

HALLERTAU. **Spring Work** started early in March 1961 under warm weather. The work could be finished in good time. Part of the hop yards, especially on greater farms, had already been cut during the autumn of 1960.

There was generally good weather in April 1961 which benefited growth. The initial good development, however, was hampered by cool and rainy weather in May and June. The early advantage of development was offset by these conditions. **Downy Mildew** had to be carefully controlled, whereas **Aphids** and **Red Spider** were no danger. Preventive sprayings against these insects were effected. Working the hop yards became very difficult especially on low locations. A heavy **Hail Storm** on June 22nd, 1961, occasioned local damages within the districts of Hohenwart, Pfaffenhofen, Wolnzach and Geisenfeld.

Warmer weather starting by the end of June/beginning of July was favourable for growth. The hops, however, had not always reached the height of the trellises during the first half of July. First **Bloom** was already apparent at that time.

In mid-July the hop yards generally showed a rather unequal aspect, although the plants had offset some inequality under better weather conditions. The height of the trellises was mostly reached and a good formation of laterals was visible. The **Set** as well as the **Bloom** did not develop uniformly. Preventive sprayings against **Downy Mildew** had to be continued. There were practically no **Pests** with the exception of **Aphids** which appeared locally somewhat more by the end of July.

The consequences of weather conditions during the vegetative period were apparent in the stand of the hop yards in mid-August. The aspect was not uniform and the **Formation of the Cones**, too, could not quite satisfy after a somewhat spotty bloom of the hops. In August, warmer weather was very necessary for the **Ripening** of the hops but climatic conditions remained changeable. **Harvest** started during the last days of August and was finished under good weather conditions.

Quality. Hallertau hops of crop 1961 had medium sized, well formed cones of green colour with occasional **Wind Whipping**. Light lupulin of good aroma was amply present. The hops were well dried but showed in part the influence of automatic harvesting.

SPALT. The hops were off to a quick start under warm weather and showed vigorous shoots. The **Uncovering** and **Cutting** was in full swing in April and was finished under good weather conditions.

The hop yards showed a favourable development in March and April under warm weather and welcome rains. Temperatures, however, fell considerably during the first half of May although there were no frosts. Growth came to a standstill and the initial advance in development was offset under constantly cool and wet weather in May. **Downy Mildew** had to be carefully controlled. A **Hailstorm** on June 8th, 1961, occasioned local damages.

Warmer and sunshiny weather came only in mid-June. The vines had between 1 m and 3 m of height. Generally, the hop yards showed a very unequal stand as a consequence of the earlier weather conditions. Spraying was much hampered by waterlogged gardens. Very favourable weather started in mid-June, so that the hop vines could develop better. Laterals were plentiful but only part of the hop yards had reached the height of the trellises in mid-July. **Bloom** started at that time. With the exception of some local damages by high **Winds** the plants were rather healthy but the stand of the hop yards was often very thin and pointed.

The vegetative development of the hops was not much favoured in August as nights remained cool even if the weather during the days was sunny with occasional precipitations. The unequal stand of the hop yards remained and the **Ripening** of the hops was retarded by cool weather. The **Harvest** started at the end of August and was finished under good weather conditions.

Quality. Spalt hops crop 1961 had rather uniformly sized cones of green until yellowish-green colour with occasional offcoloured lots and some **Wind Whipping**. Lupulin of light yellow colour and good mild aroma was amply present. The hops showed a somewhat increased content of leaves and stems as a consequence of machine picking.

TETTNANG. The weather was extremely warm during the spring of 1961. The plants had come well out of dormancy and **Spring Work** could start already by the end of February/beginning of March 1961. The hops grew quickly and well under warm weather even if precipitations were somewhat scarce until mid-April. At that time, cool and wet weather started, which hampered growth. This general situation continued until mid-June. The hop yards had a very unequal stand and the vines had reached only about half until three quarters of the height of the trellises. Late cut gardens, especially on heavy soils, were notably retarded in growth. Cultivation and preventive sprayings against **Downy Mildew** were carefully effected despite waterlogged yards.

Warm summer weather started during the middle of June. The vines grew better but the general stand was retarded against former years. The aspect of the hop yards continued rather unequal.

The hop yards had reached the height of the trellises generally during the first decade of July and showed some overhang. The plants were somewhat thinner than normal but had an ample set of laterals. First **Bloom** started in mid-July in early cut gardens. Preventive sprayings against **Downy Mildew** had to be continued whereas **Aphids** and **Red Spider** were scarcely present.

The hop yards made a continued good development at the beginning of August. **Bloom** was good and the plants had somewhat offset earlier delays in growth. Good weather conditions benefited the hops during the middle of August as warmer weather and welcome rainfalls continued. The formation of the cones had started everywhere. Generally, the hop yards were thinner and more pointed than normal and had no especially good overhang.

The weather turned rainy and cooler during the second half of August which retarded the **Formation** of the **Cones** and the **Ripening**. The hops, however, were generally well ripened as the vines had less foliage than normal. **Picking** started sporadically on August 28th, 1961, was in full swing at the beginning of September and was finished under favourable weather conditions.

Quality. Tettng hops crop 1961 had uniform cones of medium size and green-yellowish colour. Ample lupulin of fine and mild aroma was present. Tettng hops, too, included lots which showed the effects of machine picking.

WURTTENBERG. Owing to warm and dry weather, the **Uncovering** and the **Cutting** of the hops started already in March 1961 which was considerably earlier than in normal years. The hops showed strong shoots and grew very well. With the exception of an occasional lack of precipitations, the hops had a very good development under fine weather conditions during the first half of May. In mid-May, cold and rainy weather with heavy **Winds** started and this condition prevailed until June 1961. The initial advantage of the development was offset by hampered growth during this time.

The hops had reached half the height of the trellises in mid-June. Preventive sprayings against **Downy Mildew** had to be effected. Fine summer weather prevailed in June and July so that the hops grew well and with many **Laterals**. On the average, the height of the trellises was reached at the beginning of July and there was some overhang. Late cut yards made an exception to this. The laterals were well developed.

Local damages were effected by strong **Winds** at the beginning of July. Early varieties were in **Bloom** in mid-July. At this time **Burrs** started on late varieties.

Cooler weather during July was not so good for growth. The development of the vines was not uniform and generally the plants showed less leaves than normal. Early varieties were in **Full Bloom** and showed a normal set. The blooming of late varieties was somewhat retarded.

During the first half of August the hop yards could develop well under fine summer weather. By mid-August, the **Formation** of the **Cones** had started on early varieties whereas late varieties were in full bloom. The weather became cooler and more rainy again during the second half of August which retarded the formation of the cones and the **Ripening** of the hops. The **Harvest** of early hops started at the end of August 1961 and was favoured by weather conditions.

Quality. Wurttemberg hops crop 1961 had small to middling sized cones of green but not always uniform colour. The light lupulin had a good aroma. The picking was generally good.

HERSBRUCK GEBIRGE. An early start of **Spring Work** allowed finishing of these chores already during the second half of April. The hops were off to a vigorous start owing to the warm weather. Warm and ample precipitations during April and at the beginning of May benefited growth especially in early cut gardens.

Wet and cold weather started about mid-May. Even if temperatures were not so low as to make frosts possible, the development of the plants was retarded and this offset the initial advance in growth. The vines, generally, had reached only 2 m at the beginning of June. Under changeable weather until mid-June early uncovered gardens reached about half the height of the trellises. The general development, however, was very unequal. **Downy Mildew** had to be carefully controlled. Warmer weather since mid-June benefited growth and strong laterals developed especially on the upper part of the vines.

The general stand of the hop yards continued rather unequal until the middle of July. **Bloom** started at this time on early varieties. The overall development of the vines was retarded as against normal years. Cooler weather by the end of July retarded bloom of late varieties whereas the **Formation** of the **Cones** started on early hops.

The weather continued changeable in August 1961 so that the formation of the cones especially on late varieties was retarded. The harvest started by the end of August 1961.

Quality. Hersbruck hops crop 1961 showed small to middling sized and somewhat unequal cones. The colour was green in general but there were occasional lots of somewhat brownish colour. Light lupulin of good aroma was not quite so amply present as the year before. The drying of the hops was better than in former years but it has to be pointed out that picking was not always satisfactory.

Trials to control **Verticillium Wilt** are continued on the experimental hop farm Hüll/Hallertau. It has been learned that disinfecting the ground either in the planting holes or extended over the whole surface of an infected hop yard gives no full result after one single application only. Repeated applications, however, are not possible because of economical reasons.

**Verticillium
Wilt**

Further experiments with a systemic fungicide, too, have not yet resulted in success. Work on these trials is to be continued.

Verticillium Wilt was notably less present in 1961 as a consequence of weather conditions. Infections became apparent only during the course of August 1961. The extension of the disease remained limited. New infections were officially noted in eleven hop yards only.

The use of hop picking machines grows from year to year as shown by the following table:

**Machine
Picking**

	1958	1959	1960	1961
Hallertau	23	84	430	594
Other districts	10	12	87	167
Total	33	96	517	761

At the present time a considerable number of new picking machines is being installed in order to ease the continued lack of labour. For this reason, the bigger part of hops crop 1962 will be harvested by machines.

In the same way as in almost all countries, in Germany, too the estimate of the crop 1961 was too high. The hops made a very good showing on the vines but the result of the harvest was not up to expectations after the hops were gathered into the barns.

**Crop Estimate
1961**

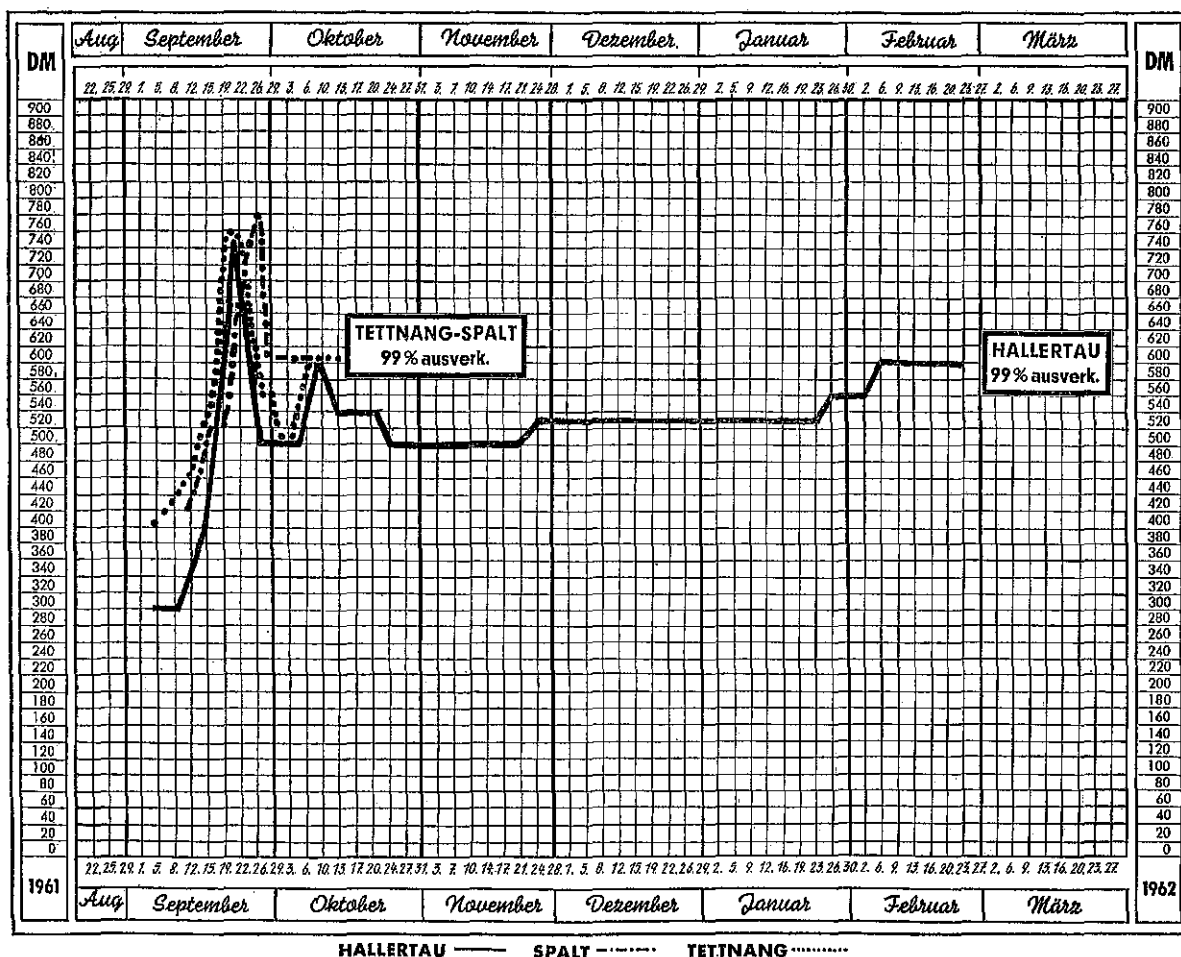
	Yield estimated lbs.	Yield weighed on May 3rd, 1962 lbs.
Hallertau	23,700,000	20,856,508
Spalt	3,085,000	2,566,044
Tettwang	2,645,000	2,634,387
Hersbruck Gebirge	1,710,000	1,090,836
Wurttemberg	330,700	311,400
Jura	606,300	516,648
Baden	88,200	83,113
Pfalz	77,150	70,106
Total	<u>32,242,350</u>	<u>28,129,042</u>

Bitter Values of Crop 1961

Origin	Total resin content anhydric	Soft resins %	Humulon %	Lupulon + Fraction of soft resin %	Hard resins %	Bitter value Wöllmer					
						1961	1960				
Hallertau	17.9	15.6	87.15	7.1	39.66	8.5	47.49	2.3	12.85	8.0	7.1
Hallertau/Au	17.3	15.2	87.86	6.1	35.26	9.1	52.60	2.1	12.14	7.1	7.0
Hallertau/Mainburg . .	18.0	15.7	87.22	6.9	38.33	8.8	48.89	2.3	12.78	7.9	6.6
Hallertau/Wolnzach . .	18.1	16.0	88.40	6.8	37.57	9.2	50.83	2.1	12.60	7.8	6.8
Spalt	18.3	16.2	88.52	6.9	37.70	9.3	50.82	2.1	11.48	7.9	7.0
Tettngang	18.1	15.9	87.85	6.9	38.12	9.0	49.73	2.2	12.15	7.9	7.9
Württemberg	17.4	15.4	88.51	6.3	36.21	9.1	52.30	2.0	11.49	7.3	7.1
Hersbruck	18.9	16.2	85.71	7.2	38.10	9.0	47.61	2.7	14.29	8.2	7.4
Alsace	16.1	13.4	83.23	4.4	27.33	9.0	55.90	2.7	16.77	5.4	8.0
Belgium/Northern-Brewer	21.4	18.9	88.32	9.4	43.93	9.5	44.39	2.5	11.68	10.5	11.7
Saaz	16.5	14.5	87.88	6.0	36.36	8.5	51.52	2.0	12.12	7.0	5.7
Jugoslavia	16.3	14.6	89.56	7.3	44.78	7.3	44.78	1.7	10.44	8.1	8.8
U.S. Seedless Yakima .	15.6	12.9	82.69	6.2	39.74	6.7	42.95	2.7	17.31	7.0	6.2

Hop Purchase Crop 1961 in Germany

The general tendency on the hop market in Germany was dull still in July 1961. There remained an unsold stock on farms of about 8,000 cwts. crop 1960 and the brewing industry appeared well covered for hops by supplies in hand and advance contracts. In addition, favourable quotations for hops of other European proveniences crop 1961 appeared on the world market at the beginning of September 1961. The result of the crop estimate in Germany which showed a smaller crop than in 1960, therefore, was accepted with calm.



The market activity during the first two weeks in September was limited mostly to the handling of contracted hops. About mid-September it became known that supplies in farmers' barns were sometimes considerably smaller than initially expected. Farmers held back when some purchase activity developed as contract hops had to be delivered in the first line. The changed market situation found especially active resonance in the district of the Hallertau. About 60% of the crop were under contract so that a very narrow market developed for free available hops. As farmers were unwilling to sell, purchasers became very nervous and this resulted within a very few days in an overheated development of prices. Quotations jumped within ten days from DM 300.— to DM 750.— for Hallertau hops although there was scarcely any actual trading. This hectic development influenced at once the other districts of produc-

tion and all differences of quotations between proveniences disappeared. Spalt and Tett-
nang hops were quoted at top prices of DM 750.— as well and during some hours prices for
these generally more favoured hops were lower than quotations for Hallertau hops.

The culminating point was reached on September 20th, 1961. From then on the market
activity was ruled by more sober reflections.

HALLERTAU. First small lots were sold on the basis of DM 300.—. Prices began to move
upward on September 10th, 1961. Quotations reached DM 350.—/360.— on September 12th,
had attained DM 380.—/400.— on September 13th and jumped after a short interval to
DM 450.— on the 16th, DM 500.—/550.— on the 18th and DM 700.—/750.— on Septem-
ber 20th. Farmers already talked about DM 800.— when the fact was realized that this pricing
situation had been sustained by only inconsequential quantities in actual trading. As a conse-
quence, the market activity entered into a complete standstill.

A new pricing basis of about DM 500.— developed already at the end of September
and considerable purchases were effected on this basis. Increased demand resulted in a
renewed upswing of prices during October which was, however, of only very short duration.
Under occasional oscillations only, the Hallertau was sold out to a considerable extent at
prices of DM 500.—/530.— until the middle of January 1962.

About the end of January 1962, important demand from Eastern countries appeared on the
market which, however, was already emptied to a considerable extent. Prices rose once
again until DM 600.—/630.— at the beginning of February. By mid-March 1962 there were
only about 1500 cwts. of hops crop 1961 unsold on farms in the Hallertau.

SPALT. First lots were sold at DM 410.—/420.— at the beginning of the harvest. Increased
demand occasioned a rise in quotations to DM 470.—/500.— by mid-September. Further
developments ran conform to the district of Hallertau and a top price of DM 780.— was
paid. Under constant trading, the Spalt district was sold out at 90% already at the end of
September. Final lots changed hands at DM 600.— at the beginning of October 1961.

TETTANG. Purchasing activity started quickly soon after the harvest. First bids were
accepted at DM 400.—/410.— but prices rose to DM 450.—/460.— on September 11th,
reached DM 500.— in mid-September, increased within a few days to DM 600.— and arrived
at the top of DM 700.—/750.— on September 20th, 1961.

Under easier trading, quotations adjusted to DM 600.—/650.— on September 26th only
to decrease to DM 550.— by the end of September. At that time, the district of Tettang was
already sold out to a considerable extent. Final lots were sold at the beginning of October at
unchanged prices with only occasional oscillations.

HERSBRUCK GEBIRGE. During the first days of the harvest only small lots changed
hands at DM 300.—. Bids rose to DM 330.— by mid-September but trading remained slack.
Quotations rose within a few days to DM 420.—/450.—, reached DM 500.— on September
19th and DM 600.— on September 20th, 1961.

A price bracket of DM 550.—/600.— was reached about September 22nd. Quotations
were reduced to DM 500.— by the end of September/beginning of October only to decrease
to DM 400.—/430.— under continued slow trading. Hersbruck was sold out about 75% at this
time. The fact that the harvest would reach only about two thirds of the estimate resulted
in more active demand. Prices rose to DM 450.— on October 6th and reached once again
DM 500.— in mid-October. On this basis the district of Hersbruck was sold out 95% until the
middle of December 1961. Final lots were taken out of the market during the end of Decem-
ber/beginning of January 1962 at somewhat decreasing prices.

WURTEMBERG. First purchases were effected in mid-September at DM 330.—. Bids
to farmers rose to DM 400.—/420.— until September 18th and reached DM 500.—/520.— by
the end of September, under active demand. Including the hops accepted by the coopera-
tive, the district was sold out at the end of October 1961.

Despite the fact that the market situation did not warrant any reasons for it, hop auc-
tions were held in Tettang. On two days, only small quantities were handled at current
prices and no more auctions took place thereafter.

The equalizing function of the Nürnberg market became notable already in September
1961. Between September 15th and September 20th, when prices rose continuously in the
districts of production, sales in Nürnberg were effected on a more favourable basis. This con-
tributed to retarding the upswing of quotations and directed the market into quieter channels.

Hop auctions

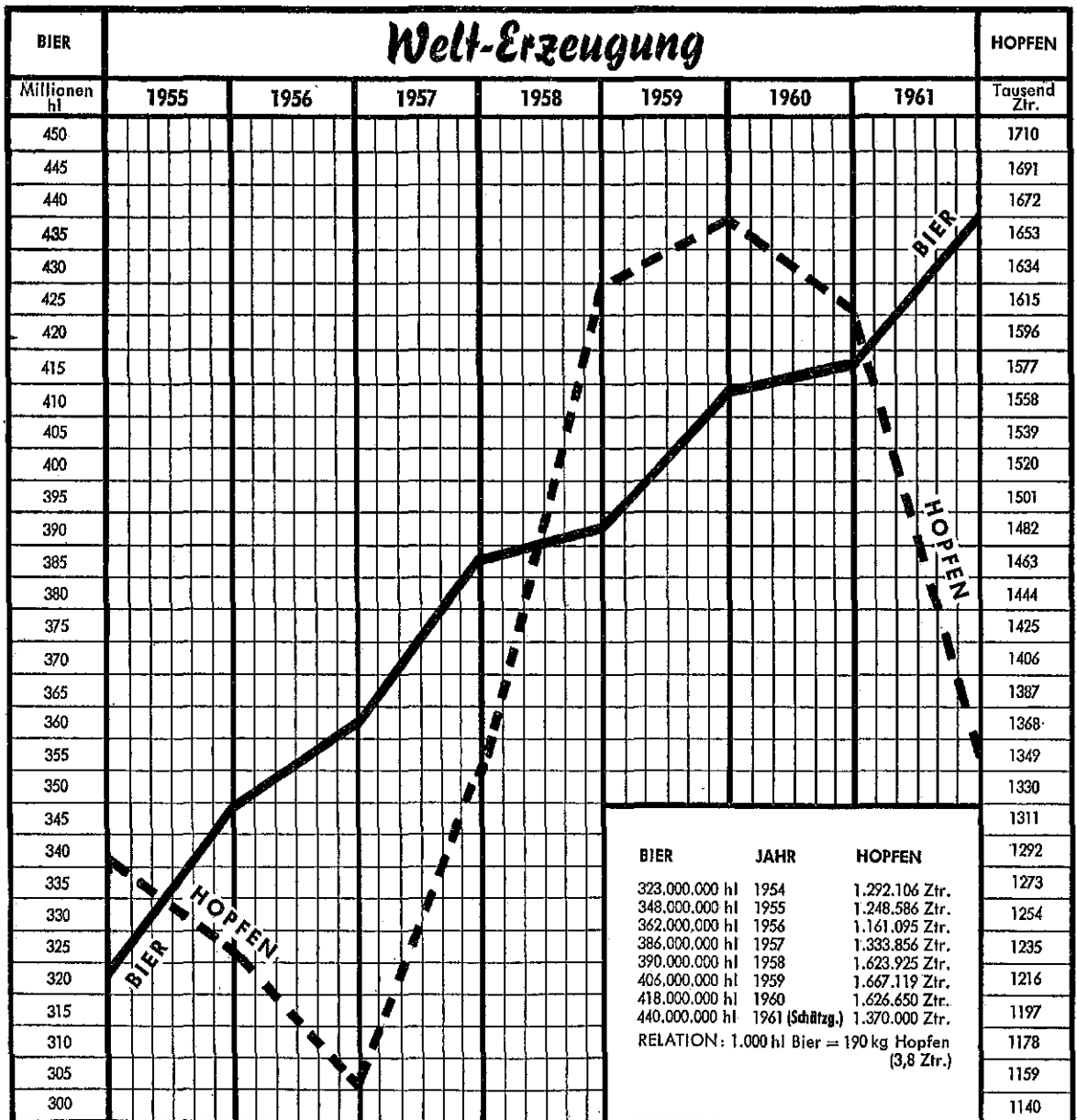
**Nürnberg
Market**

The market activity was quiet by the end of September 1961. Hallertau hops were quoted at DM 625.—/650.—, Spalt and Tettngang at DM 640.— and Hersbruck hops at DM 520.—/540.—. Spalt and Tettngang hops maintained quotations as offers were small whereas prices for Hallertau hops declined until DM 530.—/560.— and Hersbruck hops until DM 470.—/490.— by the end of October.

After a passing increase of quotations, prices for Hallertau hops had returned to DM 540.—/550.— by the end of October whereas Hersbruck hops were firm at DM 520.—/530.—. As the districts of Spalt and Tettngang were sold out, these proveniences were only traded in small occasional lots on a basis of DM 620.—/630.—.

This general pricing situation was maintained with only occasional oscillations until the middle of January 1962. More active demand during the second half of that month resulted in higher prices of DM 670.— for Spalt and Tettngang, DM 650.— for Hallertau and DM 550.— for Hersbruck hops in February 1962. Trading was at a standstill from the middle of March until the middle of May 1962, which occasioned a decrease of quotations. Hallertau hops were traded at DM 520.—/530.— whereas Spalt and Tettngang hops were priced at DM 650.—/660.—. By the end of May 1962 prices for Hallertau hops had slipped to DM 460.—/470.— (all quotations based on prices for Interim packed hops).

World production of beer and hops



Market Survey

The world production of hops crop 1961 was smaller by about 260,000 cwts. in 1961 which corresponds to **About 16% Less** than the year before. This decline of the crop result was occasioned less by a decrease of acreage and more by **Unfavourable Weather Conditions**. As a consequence, already in September 1961 a rather firm market tendency developed. After a depressed period during two years, the hop market suddenly changed to a seller's market.

The German hop market especially was under strong tension since mid-September 1961 owing to the high percentage of hops under contract and a consequently decreased supply of free available hops. The German market was the center of the upswing of prices on the world market. Price increases in Germany were transferred quickly to other hop markets in

Western Europe. Against this prices were maintained on the initial basis for Yugoslavian and Czechoslovakian hops. Demand on the world market, therefore, turned to these proveniences. Orders were placed to such an extent that deliveries became difficult later on and certain adjustments were necessary.

Demand concentrated upon German hops after Yugoslavia and Czechoslovakia had been sold out and prices for German hops rose higher than generally expected before the harvest. The hop market in the USA, too, benefited by the changed situation. Prices for hops crop 1961 rose and the market was emptied to a considerable extent from hops of older crops as well. The usage of American hops in Europe increased once again.

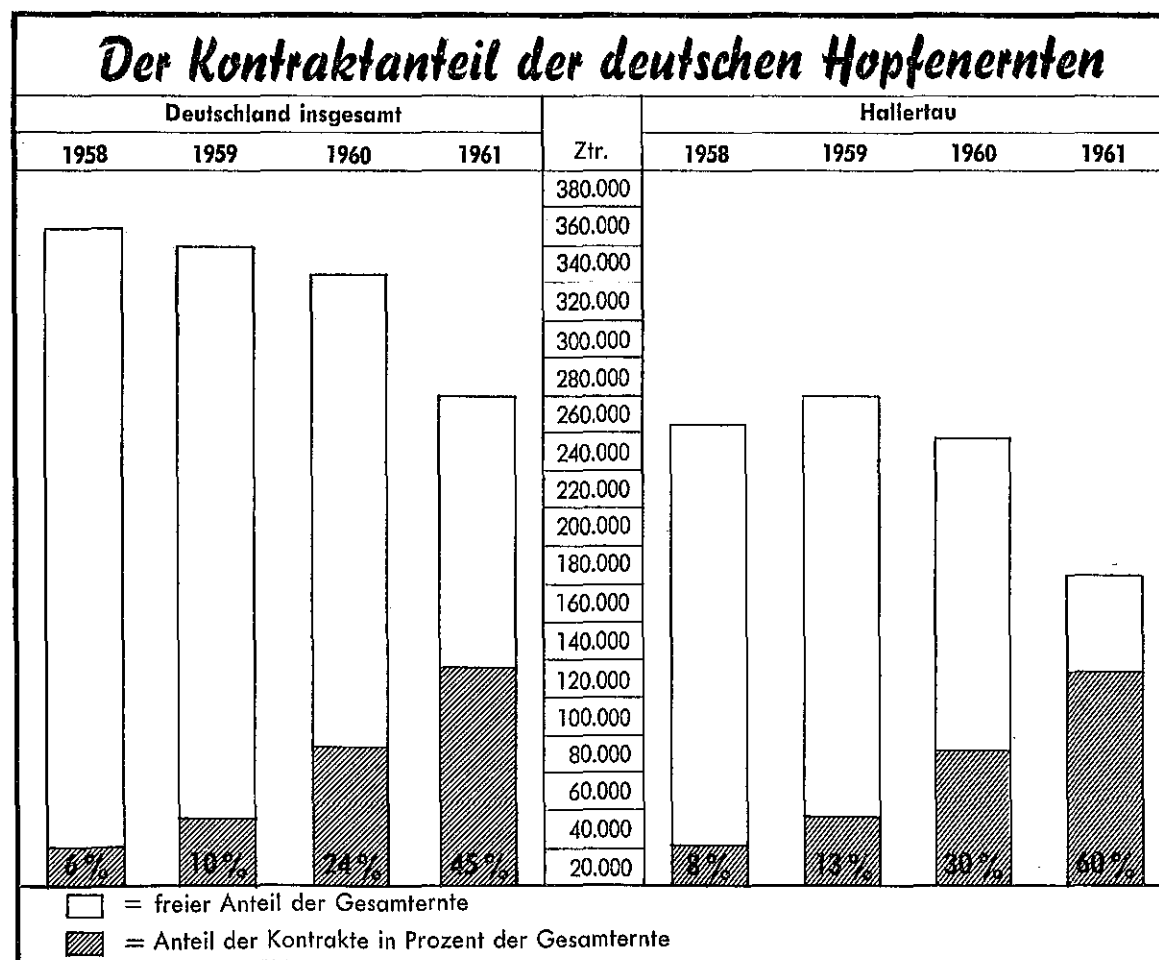
The brewing industry had to rely upon hops in stock to make up for smaller supplies of crop 1961. Generally, this presented no difficulties.

The tendency towards advance contracts for hops in Germany were stimulated initially by the extreme pricing situation for hops crop 1957. The practice of advance contracts had already been accepted on a broader basis by the German brewing industry following experiences in purchases of American hops. In addition, developments on the hop market led to the desire to dispose of at least about half of hop necessities for longer periods and on a firm basis of calculation. The German market was ready for the introduction of advance contracts for hops.

First contracts in January/February 1958 were effected on the basis of five years deliveries for Hallertau hops. The relatively greater size of farms as well as the interest of farmers had predisposed the Hallertau for advance contracts. The rising importance of hop contracts within the market development is shown by the following table:

Advance Contracts

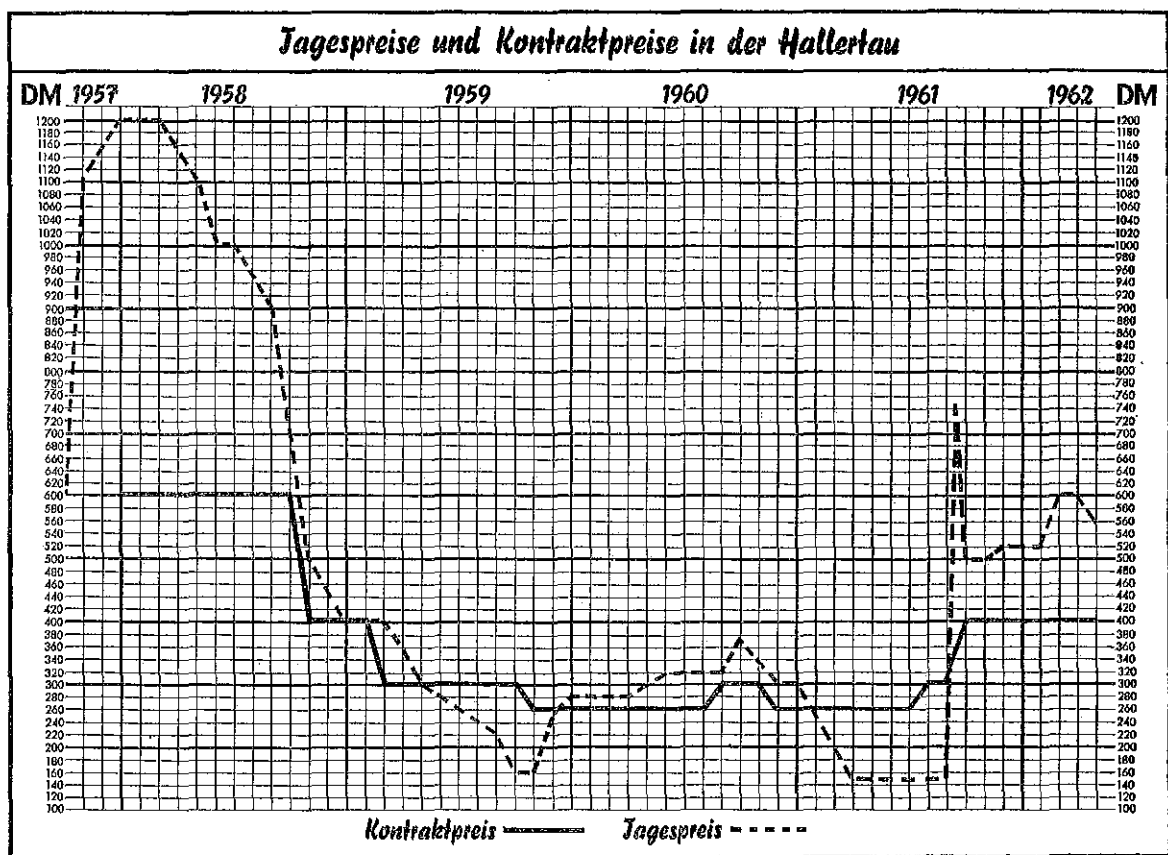
Crop Volume and Percentage of Contracts in Germany and the Hallertau



It can be estimated that of Hallertau hops crop 1962 alone about 75% are under contract. In the same way, contract activity has now started in the districts of Spalt, Tettnang, Hersbruck, Jura and Baden. About 60/65% of the coming crop 1962 in Germany are estimated to be under contract.

During the past crop years, practical experiences have resulted from the liquidation of advance contracts. In the beginning, contracts on a five years basis were general but contracts for 3 years have been accepted as well. Farmers prefer to engage for not more than 75% of an average crop, so that contracts can be fulfilled even if the harvest is somewhat under average as was the case in 1961.

Hallertau
Prices for
Spot Hops
and
Contracts



It has been shown especially that the pricing trend for advance contracts follows the general market tendency, but remains always on an average basis. The stabilisation of prices thus obtained is to the advantage of both farmers and brewers. The already considerable percentage of advance contracts has led to a structural change within the German hop market. Whereas up to now the market development showed a distinct seasonal character, farmers and dealers now will be occupied realizing contracts until far into October of each year. Present indications point to a new situation regarding the spot market which is expected to start only after contract deliveries have been finished.

It has to be borne in mind especially that the percentage of free available hops becomes smaller year by year and that developments on the spot market will be influenced quite heavily by this fact. It has to be expected that prices for free hops in future will react with extreme ups and downs to the market's influence according to the volume of the crop and the demand situation respectively.

Farmers'
Cooperatives
in Germany

The estimated quantity of hops handled by cooperatives in 1960 and 1961 has been computed as follows:

Cooperative	Quantities handled		Percentage of Crop 1961
	Crop 1960	Crop 1961	
Hallertau	12,000 cwts.	12,000 cwts.	abt. 6.3%
Spalt	7,000 cwts.	4,000 cwts.	abt. 17.2%
Tett nang	2,000 cwts.	800 cwts.	abt. 3.4%
Hersbruck Gebirg	6,800 cwts.	750 cwts.	abt. 7.6%
Wurttemberg	2,000 cwts.	1,000 cwts.	abt. 35.4%
Jura	1,000 cwts.	300 cwts.	abt. 6.4%
Total	30,800 cwts.	18,850 cwts.	abt. 7.4%

As a comparison to the above table which is based on estimate only as no effective figures are available, the following information may be of interest showing the acreage under hops in hand of the members of the several cooperatives:

Cooperative	Acreage of members	
	In acres	In % of total area
Hallertau	11,120 acres	78.4%
Spalt	1,235 acres	55.1%
Tett nang	295 acres	16.7%
Gebirg	1,040 acres	84.0%
Wurttemberg	160 acres	59.1%
Jura	220 acres	53.6%

The Cooperative **HALLERTAU** advanced DM 200.— per 50 kilos for hops crop 1961 and limited the acceptance of deliveries until September 30th, 1961. As some lots had been delivered after that date, the final payments varied as follows:

	Delivery	
	until Sept. 30th, 1961	after Oct. 1st, 1961
Grade I	DM 550.—	DM 525.—
Grade II	DM 525.—	DM 510.—
Grade III	DM 500.—	DM 500.—

The Hallertau Cooperative still disposes of about 3,000 cwts. of hops crop 1958 which could not yet be sold. Restitutions of payments by farmers have been settled with the exception of a balance of about DM 250,000.—.

Retarded publications show that various cooperatives have made final payments for hops of the old crop 1960 as follows:

Cooperative	Premium	Grade I	Grade II	Grade III
Jura	—	DM 300.—	DM 280.—	—
Wurttemberg	—	DM 275.—	DM 270.—	DM 265.—
Tettngang . . .	DM 430.—	DM 415.—	DM 400.—	DM 380.—

The Cooperative **HERSBRUCK** could effect a liquidation for hops crop 1960 only in March 1962. The sale of these hops resulted in a loss. Farmers had to be asked to make restitutions for hops delivered as follows: Grade I DM 80.— per cwt., grade II DM 87.— per cwt.

Export of German Hops Crop 1961

September 1st, 1961 — March 31st, 1962

Country	lbs.	lbs.	Country	lbs.	lbs.
Albania	17,637		b. f.	114,860	7,631,005
Belgium-Luxembourg	537,041		Ivory Coast	26,455	
Denmark	119,710		Ghana	5,512	
Finland	154,763		Cameroons	6,614	
France	683,206		Canary Islands	19,841	
Great Britain	396,167		Kenya-Uganda	47,178	
Ireland	17,196		Congo	81,570	
Italy	856,928		Liberia	441	
Malta	4,409		Lybia	4,850	
Netherlands	253,309		Madagascar	6,614	
Norway	149,692		Morocco	26,455	
Austria	403,221		Moçambique	22,046	
Portugal	81,791		Nigeria	16,535	
Spain	356,484		Ruanda-Urundi	16,535	
Sweden	337,965		Senegal	19,841	
Switzerland	477,957		Sudan	7,716	
Czechoslovakia	2,425		Union of South Africa	25,573	
Hungary	341,713		Tunis	8,818	
Europe		5,191,614	Africa		457,454
Argentina	109,128		Hongkong	32,187	
Bolivia	4,409		India	9,921	
Brazil	333,336		Indonesia	59,965	
Canada	14,330		Iraq	8,818	
Chile	882		Japan	835,543	
Columbia	92,593		Korea	11,023	
French West Indies	6,173		Lebanon	13,228	
Nicaragua	2,205		Malayan States	8,818	
Panama exc Canalzone	2,425		Pakistan	882	
Uruguay	11,023		Philippine Isl.	84,436	
U.S.A.	1,692,031		Singapore	3,307	
Venezuela	155,424		Syria	2,866	
West Indies	15,432		Thailand	57,320	
America		2,439,391	Cyprus	9,259	
Egypt	13,228		Asia		1,137,573
Ethiopia	31,085		Australia	2,205	
Algiers	4,409		French Pacific Isl.	5,512	
Angola	50,708		Australia		7,717
Dahomey	15,432		Total		9,233,749
c. f.	114,860	7,631,005			

German Hop Exports Crop 1961

German hop exports crop 1960 until March 31st, 1961 = 9,375,062 lbs.

The following lots of hops have been imported from September 1st, 1961, to March 31st, 1962:

Belgium-Luxembourg	500,665 lbs.	b. f.	3,049,403 lbs.
France	248,238 lbs.	Czechoslovakia	844,803 lbs.
Great Britain	36,376 lbs.	U.S.A.	1,291,675 lbs.
Jugoslavia	2,264,124 lbs.	Total	5,185,881 lbs.
c. f.	3,049,403 lbs.		

German Hop Imports Crop 1961

German hop imports crop 1960 until March 31st, 1961 = 4,083,140 lbs.

**German
Hop Acreage
1961**

Verification of the hop acreage in 1961 resulted in the following figures:

Districts	1939 Acreage acres	1961		
		Existing acreage acres	Additional acreage acres	Total acres
Hallertau	11,317	13,958	230	14,188
Spalt	2,276	2,184	50	2,234
Hersbruck	2,118	1,235	10	1,245
Jura	200	410	5	415
Tett nang*)	—	28	—	28
Aischgrund/oth. distr.	200	22	2	24
Bavaria	16,111	17,837	297	18,134
Württemberg/RHW.	1,223	274	—	274
Tett nang**)	1,636	1,741	—	1,741
Baden	440	64	—	64
Baden-Württemberg	3,299	2,079	—	2,079
Pfalz	151	45	—	45
Rheinland-Pfalz	151	45	—	45
Germany	19,561	19,961	297	20,258

*) areas in Bavaria

** except areas in Bavaria

The acreage has been reduced by 511 acres = 2.46% against 1960. The decreases are distributed among the various districts of production as follows:

Hallertau	1.1%	Württemberg	27.0%
Spalt	1.1%	Tett nang	2.9%
Hersbruck	9.5%	Baden	13.3%
Jura	5.6%	Palatinate	28.0%

**Hop Acreage
1962**

Visits to the various districts of production show that an increased acreage may be expected in 1962 which, however, will come into full bearing only in the fall of 1963. The expansion of acreage is especially notable within the Hallertau.

**European
Economic
Community
(E.E.C.)**

DEVELOPMENT of the E.E.C. The start of the E.E.C. into its second phase on January 1st, 1962, has been of special importance for the future development of Western Europe. This transition followed a decision of the Council of Ministers of the E.E.C. on January 14th, 1962, according to Article 8 of the Rome Agreement. Measures for the further integration of the Common Market will now be taken, among which difficult problems of agriculture are of first importance.

CUSTOM TARIFFS. Within the second phase of the E.E.C. during the coming four years starting January 1st, 1962, three further decreases of internal custom tariffs are planned: on July 1st, 1963, December 31st, 1964, and December 31st, 1965. In order to coordinate the external tariffs, custom tariffs of member nations will be regulated in three steps to approach the scheduled rates of the mutual external tariff. The rate for hops will be 12% ad valorem. The following custom rates are in force since January 1st, 1962:

	Custom Duties for Imports from				Additional Import Taxes
	Members of the E.E.C.		other countries		
	since Jan. 1st, 1961	since Jan. 1st, 1962	since Jan. 1st, 1961	since Jan. 1st, 1962	
Belgium	6.0%	5.2%	8.0%	9.2%	12%
Germany	12.0%	10.5%	13.5%	13.5%	4%
France	9.6%	8.4%	12.0%	12.0%	11% + 3%
Italy	3.2%	2.8%	4.0%	6.4%	3.3% + 0.5%
Luxembourg	6.0%	5.2%	8.0%	9.2%	2%
Netherlands	6.0%	5.2%	8.0%	9.2%	5%

HOP IMPORTS are entirely free both in Luxembourg and the Netherlands. The same applies to Western Germany with the exception of imports from Czechoslovakia, the extent of which has been settled according to value in a Trade Agreement. In Belgium and France, however, licences for the import are necessary for German hops, too, despite the fact that hops from these two countries can be imported freely into Germany.

HOP EXPORTS. After the demand of the brewing industry within the six member nations of the E.E.C. has been covered, there still remains a balance of hops to be exported. This balance increases according to imports of hops from Czechoslovakia, Yugoslavia and the USA. It has to be taken into consideration that the import of hops from other countries is subject not only to questions of trade policy, but serves to cover the demand of the brewing industry for special qualities of hops.

MARKETING AGREEMENT for HOPS. The demand for a marketing agreement is not new. The unsatisfactory development of prices for hops of crop 1959 and 1960 has led to united efforts of Farmers' Organisations in Belgium, France and Germany. By the end of 1959, a project of a marketing agreement within the E.E.C. had been drawn up. A consultative hop commission was established in March 1961 and has been installed as "Commission of Hop Growers of the Common Market" since March 8th, 1962. This commission has held discussions with the authorities of the E.E.C. in Brussels in February 1962.

In addition, the German Government as well as the *Bundestag* have been approached in this connection. On February 22nd, 1962, a printed Application No. 4/217 asking for discussions with the E.E.C. in the interest of a hop marketing agreement has been submitted to the *Bundestag*. Furthermore, a Little Question IV/229 was sent to the *Bundesernährungsministerium* which, however, in its reply IV/255 on March 15th, 1962, decided that the hop economy was not considered a fit subject for a marketing agreement.

Contrary to the Government's opinion the *Ausschuß für Ernährung, Landwirtschaft und Forsten*, on April 18th, 1962, submitted the above mentioned application IV/217 with some alterations to the *Bundestag*, which accepted same on May 9th, 1962, with the following content:

- 1.) The Federal Government is asked to apply to the Commission of the E.E.C. to the effect that, for the production of hops the rules of common agricultural policy will be applied as agreed upon in the agreement of Rome. During this discussion the Federal Government is to insist upon, that for hops a schedule for regulating measures within the common agricultural policy will be introduced, in the same way as for other agricultural products.
- 2.) The Federal Government is asked to inform the *Bundestag* about the result of its efforts in this connection until June 30th, 1962.

The report of the Federal Government is expected with considerable interest.

E.E.C. COMMISSION starting in FOREIGN TRADE AGREEMENTS. As a first step toward a common trading policy of the E.E.C., an agreement with the USA regarding custom duties has been signed by the commission of the E.E.C. on February 16th, 1962, during the GATT discussions in Geneva (GATT = General Agreements on Tariffs and Trade). For the import of American hops within the E.E.C. a rate of 12% ad valorem has been made binding. The custom rate for the import of hops from the Common Market into the USA will be decreased as follows:

Value of Hops	Rate of Duty		
	since 1/7/1958	after 1/7/1962*)	after 1/7/1963
less than 50 c per lb	14 c per lb	12½ c per lb	12 c per lb
50 c per lb or over	12 c per lb	10½ c per lb	10 c per lb

*) The first reduction eventually to be effected somewhat earlier.

Further reductions of custom rates are to follow. The "Reciprocal Trade Agreements Act" however, which does not allow global decreases of custom rates in the U.S.A. has to be extended by a "Trade Expansion Act 1962".

During the preceding years, the *Deutsche Demokratische Republik (DDR)* purchased the bulk of import necessities in hops from Czechoslovakia and Jugoslavia. Conditions for crop 1961, however, had changed. Both countries of supply had only limited quantities available owing to considerable sales to Western countries and a smaller harvest. As a consequence, substantial purchases were effected in Western Germany in February 1962. For reason of prices, hops of crop 1960 and other origins were included within these purchases. Total deliveries were as follows:

German hops crop 1961	6,290 cwts.
German hops crop 1960	2,850 cwts.
Other proveniences	1,220 cwts.
	10,360 cwts.

Payment for delivery was made via sub-account II according to the agreement of the Inter-German trade.

Spring Work was finished in good time under favourable weather conditions. The year 1961, however, was especially unfavourable for the development of the hops. After a good start, growth was hampered by cold weather, excessive rainfalls with **Hail** and lack of sunshine. On the average, four sprayings were effected against **Pests** and **Diseases**, but damages by **Aphids** could not be avoided. The vines reached the height of the trellises on July 10th. **Bloom** started during the end of July. Blooming was later than normal as a consequence of the cool weather. Lack of sunshine during the **Formation** of the **Cones** resulted in generally too small cones. Precipitations and average temperatures were as follows:

	March	April	May	June	July	August	Sept.
Precipitations	30.6	80.3	120.3	92.0	42.7	44.5	32.1 mm
Temperatures	7.4	12.0	10.9	17.0	16.3	17.4	17.0° C

Inter-German Trade (I.D.H.)

Deutsche Demokratische Republik (D.D.R.)

Picking started around September 4th, 1961, and was finished within a fortnight. 34 picking machines are in operation. The harvest was hampered by rainfalls during a number of days.

The **Quality** of the hops had suffered from the inclement weather and the attack of aphids, and was graded as follows: 0% Grade I, 0.6% Grade II, 57.5% Grade III, 38.1% Grade IV, 3.8% Grade V. The hops were handled centrally and accepted at identical prices to the year before which ranged from DM 600.— (Grade V) to DM 1,000.— (Grade I) per 50 kilos (D-Mark-East).

The acreage 1961 amounted to 4,450 acres of which about 1,000 acres were young gardens. About 500 acres were newly planted to hops in 1961.

The development of weather conditions during the vegetative period in 1961 was not favourable for hops. Precipitations and temperatures were as follows:

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
Precipitations	23.8	14.7	23.1	24.2	34.0	68.0	71.1	43.2	11.9 mm
Temperatures	—4.0	—1.1	5.2	10.4	12.3	18.3	16.7	17.1	14.5° C

The weather was generally cold during the entire growth of the hops whereas the month of September was exceptionally warm. Four sprayings were effected on the average against **Pests** and **Diseases**. The hops reached the height of the trellises at the beginning of July. **Bloom** started at the end of July. **Hails** occasioned local damages over an area of about 740 acres in the district of Lublin.

The harvest started on August 18th and was finished under generally good weather conditions on September 12th. Picking is done almost exclusively by hand as only three picking machines of Belgian construction are in operation.

The **Quality** was judged better than the year before and the hops were graded as follows: 8.6% Grade I and II, 81.2% Grade III and IV, 10.2% Grade V and VI. Prices for hops were fixed as follows (Basis DM 1.— = Zloty 6.—).

Grade I	Zloty 85.— per kilo (= DM 710.— per 50 kilos)
Grade II	Zloty 75.— per kilo (= DM 625.— per 50 kilos)
Grade III	Zloty 70.— per kilo (= DM 585.— per 50 kilos)
Grade IV	Zloty 62.— per kilo (= DM 515.— per 50 kilos)
Grade V	Zloty 48.— per kilo (= DM 400.— per 50 kilos)
Grade VI	Zloty 19.— per kilo (= DM 160.— per 50 kilos)

The total acreage in 1961 included 295 acres new gardens. The entire crop was handled centrally.

Czechoslovakia

The winter 1960/61 was mild, so that the hops came out of dormancy without damages. **Spring Work** was finished rather early under favourable weather conditions. Precipitations were distributed as follows:

	March	April	May	June	July	August	Sept.
Saaz	24.9	44.7	85.2	57.5	57.2	63.4	20.4 mm
Auscha	40.3	36.4	90.6	67.0	62.9	49.0	21.6 mm

The weather was unstable during the vegetative period in 1961, so that the hops could not develop to satisfaction. Four to six sprayings were effected against **Downy Mildew**. The hops reached the height of the trellises during the second half of June, but the growth was weaker than in normal years and there was only little overhang. The vines had less foliage than usual. **Bloom** started in mid-July and at the same time weather conditions improved which benefited the **Formation** of the **Cones**.

Picking started on August 25th and was finished on September 11th, 1961. The harvest was favoured by fine and warm weather. 170 picking machines are installed, but not all of them were used to full capacity. The capacity of the kilns has been increased in the meantime.

Quality. Saaz hops crop 1961 were graded as follows: 82.4% Grade I, 17% Grade II, 0.6% Grade III. The hops had well formed cones of average size and yellowish green colour which occasionally was not quite uniform. The light coloured lupulin presented the well known good aroma. The hops were well dried and clean picked.

An expansion of the hop area by about 1,100 acres is said to be scheduled in 1962. At the same time hop kilns are to be increased and modern belt dryers are to be installed so that the entire output of the picking machines can be taken care of by kilning facilities.

SLOVAKIA. The hop acreage in this district has been increased by 62 acres in 1961 and stands now as follows:

Neutra-Valley	84 acres
Waag-Valley	39 acres
Bodrog-Valley	37 acres
		<u>160 acres</u>

Outside of the above districts, there still exist some smaller experimental hop yards in Slovakia. No informations have been received regarding an improvement of kilning facilities for the hops.

In the **SANNTAL (SLOVENIA)** the hops came well through the mild winter 1960/61 which brought only little snowfall. The weather was satisfactory at the beginning of the year, but a drought started by the end of July which continued through August 1961. Precipitations and temperatures were as follows:

Jugoslavia

	March	April	May	June	July	August	Sept.
Precipitations	84.5	57.3	147.0	122.3	243.2	78.5	72.3 mm
Temperatures	9.1	13.0	13.9	19.3	18.3	18.3	18.1° C

Warm weather until the middle of May benefited the growth of the hops which, however, was retarded in mid-May by lower temperatures. **Hails** occasioned local damages. The cool weather persisted until the end of June so that the hop yards about that time showed a very irregular stand. The hops reached the height of the trellises by the end of June insofar as the gardens had been cut early whereas late cut hop yards at that time had reached half or two thirds of the height of the trellises. Early cut hops, too, showed a good development of **Laterals**. Dry weather prevailed during July and August. **Bloom** started in mid-July. The plants showed an overhang only in hop yards on heavy soils. The dry weather hampered the **Formation** of the **Cones** which resulted in a considerable decrease of the harvest. About six sprayings were effected against **Pests** and **Diseases**.

Picking started on August 16th and was finished until the end of that month under warm and sunny weather. There were sufficient pickers available. The automatic harvest is introduced on one hopfarm only.

Quality. Styrian hops crop 1961 had only average sized cones as a consequence of dry weather conditions. The cones showed a uniform light green colour. Lupulin of good aroma was to be noted. The hops were well dried and cleanly picked.

The crop was graded as follows: 89.7% Grade I, 8.6% Grade II, 1.7% Grade III. The hops were handled at fixed prices. Stocks available for export were smaller than initially estimated so that quantities sold had in some instances to be coordinated to the available supplies.

State hopfarms increased hop yards by about 125 acres in 1962 whereas a continued decrease of hop acreage is to be noted among independent farmers.

BACKA. In this district, the weather was favourable for the hops during the spring of 1961. Rainfalls especially in May brought an infestation of **Downy Mildew** which, however, could be controlled in time. Precipitations and temperatures were as follows:

	March	April	May	June	July	August	Sept.
Precipitations	5.0	46.7	103.2	35.1	49.1	14.0	2.2 mm
Temperatures	7.9	14.3	14.4	20.7	20.6	21.1	18.3° C

The hops reached the height of the trellises at the beginning of June and showed first **Bloom** by the end of that month. Sprayings against **Pests** and **Diseases** were effected between 10 and 13 times.

Picking started on August 28th and was finished under good and dry weather conditions in mid-September. No picking machines are in operation, but there is no lack of labour.

Quality. The hops had uniform but somewhat smaller cones than the year before and were of good colour. The crop was graded as follows: 86.77% Grade I, 12.12% Grade II, 1.11% Grade III. The entire crop was handled centrally at average prices and was sold out by the end of January 1962.

Rainy weather during the spring of 1961 which continued until June led to an exceptionally early infestation of **Downy Mildew**. This disease was controlled by five and six sprayings, but about 10% to 15% of the harvest have been damaged by this disease. Precipitations and average temperatures were, as follows:

Hungary

	March	April	May	June	July	August	Sept.
Precipitations	4.0	118.0	78.0	95.0	37.0	9.0	2.0 mm
Temperatures	8.9	15.0	15.3	21.1	20.9	21.7	18.3° C

About 200 acres of the hop area suffered local damages by **Hails** and additional damages were occasioned by **Storms**.

The hops reached the height of the trellises during the second half of June. **Bloom** had been retarded and the growth of the hops did not show a favourable development as a consequence of dryness continuing through the following period. Hop yards had an irregular stand and late varieties especially showed a delay of growth amounting to about three weeks. Picking went on from August 25th to September 25th under dry weather conditions. There was some lack of labour.

The **Quality** of the hops was judged about equal to that of the year before, even if the **Cones** of late varieties were smaller than average. The colour of the hops was judged better than the year before. The crop was graded as follows: 13.5% Grade I, 28.5% Grade II, 28% Grade III, 20% Grade IV, 10% Grade V.

The total area of 1730 acres includes 778 acres new gardens. The average price for the hops was FT 3,480.— which corresponds to DM 1,160.— per 50 kilos at the official rate of DM 1.— = FT 3.—. The entire crop was purchased by the home breweries.

Bulgaria

The cultivation of hops, experimentally started in 1948, had reached a total area of 395 acres until 1959. During that year, 815 acres were newly planted to hops and a further area of 1,040 acres was planted to hops in 1961. In this way, the initially planned acreage totalling about 2,225 acres has been attained. All trellises continue to be installed with concrete posts in order to economize on lumber.

Belgium

In the district of **Alost** the plants came well through the mild winter 1960/61. Abundant rainfalls until the beginning of March were not favourable for **Spring Work** and did not benefit growth. Precipitations were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
88.9	78.8	8.9	57.0	69.0	36.0	92.0	78.0	37.9 mm

Good weather in April stimulated the development of the plants whereas in May and June growth was hampered by too much rainfall and cool weather. Climatic conditions improved somewhat in July, but real warm days were lacking and appeared only by the end of that month. The weather remained changeable in August and warm days were constantly followed by rainfalls and low temperatures. Generally, the lack of sunshine has unfavourably influenced the vegetative growth of the hops.

From five to six sprayings were effected against **Pests** and **Diseases**. The hop yards reached the height of the trellises at the beginning of July and were in full **Bloom** by the end of July. On the average, the vines had remained pointed and the cones on the lower third of the vines were not fully ripened.

Picking started at the beginning of September and was finished within three weeks under sometimes rainy weather. There was no lack of pickers as a result of the reduced yield of crop 1961 and the extensive use of picking machines which already handle 60% of the crop. There are 38 picking machines in operation.

Quality. The colour of the hops was better than the year before but the **Cones** were not as well developed and contained less lupulin than usual. The harvest was judged as follows: 65% Grade I, 28% Grade II, 7% Grade III.

Prices started in September on the basis of bfrs. 3,300.—/3,500.—, rose to bfrs. 3,800.—/4,00.— in mid-September, reached bfrs. 4,500.— at the beginning of October only to increase to bfrs. 5,000.— in mid-October. The harvest, at that time, was practically sold out already. Small final lots changed into second hands at partially somewhat higher prices.

POPERINGHE. The hops came well out of dormancy after the mild winter 1960/61 and were off to a good start under favourable weather until the end of April. At that time, the development was advanced about one week against average years. Cool weather in May hampered growth and **Strong Winds** occasioned local damage. The weather remained too cold in June as well. Generally, the hop yards showed weaker plants than normal and the stand of the gardens was unequal. More favourable weather in July and August was very welcome for the development of the hops. The plants reached the height of the trellises at the beginning of July. **Bloom** started at that time and the plants were in full bloom in mid-July. The formation of the cones started at the end of July. The hops did not show any considerable overhang.

Between 15 and 20 sprayings were effected against **Pests** and **Diseases**. Especially **Downy Mildew** had to be carefully controlled whereas pests were scarcely to be noticed.

The **Formation** of the **Cones** did not go as well as initially expected so that the crop remained smaller than estimated. **Picking** of early varieties started at the end of August, was in full swing on September 4th and finished around September 20th. 95% of the hops are already automatically picked, so that there remain a very few yards only where picking is done by hand. The weather during the harvest was sometimes rainy.

The hops were better in size and cone formation than in 1960. Occasional lots were off-colour by reason of Downy Mildew. The **Quality** was judged as follows: 60% Grade I, 25% Grade II, 15% Grade III.

Prices started at the beginning of September on a basis of bfrs 2,600.— for Replant Hal-lertau, rose to bfrs. 3,000.— in mid-September and reached bfrs. 4,300.— at the beginning of October. A price of bfrs. 5,000.— was quoted in mid-October and final lots were handled in November on a basis of bfrs. 5,300.—. Quotations for other varieties developed within the same price bracket.

The hop acreage planted to the new variety "**Northern Brewer**" has been increased constantly during the last few years in Poperinghe as well as in Alost. This variety is in constantly rising demand as a consequence of the high content of lupulin.

Belgium imported the following quantities of hops crop 1961 from September 1st, 1961, until January 31st, 1962:

	lbs.		lbs.
Germany West	412,481	b. f.	690,482
France	106,703	Poland	50,706
Netherlands	9,700	Great Britain	81,350
Austria	2,205	Czechoslovakia	1,052,035
U.S.A.	159,393	Jugoslavia	436,731
c. f.	690,482	Total	2,311,304

Belgian hop imports crop 1960 until January 31st, 1961 = 1,536,165 lbs.

Export of Belgian hops from September 1st, 1961, until January 31st, 1962 are shown as follows:

	lbs.		lbs.
Germany West	79,586	b. f.	187,611
France	7,716	Brit. Guayana	1,102
Italy	882	Ireland	236,774
Netherlands	2,425	Norway	1,764
Angola	6,614	Portugal	5,952
Austria	37,919	Great Britain	262,788
Brazil	11,023	Sweden	41,887
Denmark	28,660	Switzerland	11,243
U.S.A.	5,952	India	220
Finland	6,834	Total	749,341
c. f.	187,611		

Belgian hop exports crop 1960 until January 31st, 1961 = 371,696 lbs.

Precipitations in France were distributed as follows:

France

	March	April	May	June	July	August	Sept.	Oct.
Alsace	17.0	94.5	66.1	81.6	86.1	62.7	22.8	51.0 mm
North	15.5	86.1	43.8	32.5	52.2	17.8	52.1	29.3 mm

In the **ALSACE** the hops came well through the mild winter 1960/61. **Spring Work** had to be done during wet and cold weather which hampered the initial development of the hops. Fine warm weather in March and April stimulated growth, whereas wet and cold weather from the beginning of May until the middle of June was not favourable for the development of the hops.

The yards reached the height of the trellises during the first decade of July. By the end of that month the plants were in **Full Bloom** under fine summer weather. Generally, however, the plants showed the influence of the unfavourable periods of growth. The hops remained pointed and showed practically no overhang. Despite the changeable weather which hampered work in the hop yards, up to ten sprayings were effected against **Pests** and **Diseases**. The harvest started at the beginning of September and benefited from fine and dry weather. About 90 picking machines are in use, but there is still a lack of pickers to be noticed.

Quality. The Alsace hops crop 1961 were of good colour and had well sized cones but the content of lupulin was somewhat smaller than in 1960. The crop was judged as follows: 92% Grade I, 6% Grade II, 2% Grade III.

The Alsace hops were practically sold out already in September 1961 under very brisk trading. Final lots were sold during the course of the month of October. In the Alsace, farmers are accustomed to receive a first payment which ranges from NF 300.— to NF 350.— per 50 kilos. Final payments resulted in the following prices:

Premium quality	NF 400.— (DM 320.— per 50 kilos net)
Choicest quality	NF 380.— (DM 304.— per 50 kilos net)
Choice quality	NF 350.— (DM 280.— per 50 kilos net)
Good medium quality	NF 320.— (DM 256.— per 50 kilos net)

Discussions between hop farmers, breweries and trading circles in order to find a basis for advance contracts in Alsace hops crop 1961 took place during the summer of 1961. About 8,000 cwts. = 25% of the Alsace hops, crop 1961 were taken over on a contract basis.

The export trade in Alsace hops was rather active at times. There was no premium granted for the export of hops, in contrast to the year before, as prices for hops crop 1961 to farmers were considered adequate. In France, too, contracts on a three-years-basis are being introduced in order to further stabilize the market.

FLANDRES. The hops came well out of dormancy in the spring of 1961. The weather was favourable for the first growth of the hops. About 12 to 15 sprayings were effected against **Pests** and **Diseases**. The wet weather favoured **Downy Mildew** which appeared locally to a considerable extent and especially early in hop yards which had been infected already the year before. The infestation was in part so heavy that farmers considered the necessity to abandon the crop. Such yards sometimes did not produce more than 40% of a normal harvest.

Late Frosts in May as well as a **Storm** on July 17th left local damages. A further decrease of the harvest resulted when at the end of August the hops were infested by **Oidium (Powdery Mildew)**, especially on the lower third of the vines. The hops reached the height of the trellises by the end of June and were in **Full Bloom** in mid-July. There was some local appearance of **Verticillium Wilt**. It appears that especially Replant Hallertau hops are susceptible to this disease.

Picking started on September first and was finished on September 25th under generally favourable weather conditions. There were not always sufficient pickers available but 70% of the crop are already picked mechanically. 16 picking machines are in operation.

The **Quality** of the hops was judged as follows: 15% Grade I, 40% Grade II, 35% Grade III, 10% Grade IV. Replant Hallertau hops showed somewhat smaller sized cones as compared to other varieties. The colour was good but not always uniformly green.

Prices started at the beginning of September on a basis of NF 300.—, rose to NF 350.— in mid-September and reached NF 450.— at the end of that month. The top price of NF 500.— was quoted in mid-October and the harvest was sold out almost entirely on this basis. There remained an estimated quantity of about 800 cwts. unsold on farms at the beginning of January 1962. These hops were sold out practically until March 1962. Special varieties with a richer content of lupulin were especially in demand and obtained somewhat higher prices.

French hop imports for the calendar year 1961 were as follows:

Countries	Jan.—June lbs.	July—Dec. lbs.	1961 Total lbs.
Belgium-Luxembourg	19,841	7,496	27,337
Germany West	737,218	110,010	847,228
Jugoslavia	267,418	—	267,418
Czechoslovakia	415,126	—	415,126
Total	1,439,603	117,506	1,557,109

French hop imports for the calendar year 1960 = 1,159,840 lbs.

Exports of French hops in 1961 were as follows:

Destination	Jan.—June lbs.	July—Dec. lbs.	1961 Total lbs.
Algiers	35,715	60,627	96,342
Belgium-Luxembourg	35,053	53,572	88,625
Denmark	4,409	64,595	69,004
Dahomey	—	2,205	2,205
Germany West	780,428	901,020	1,681,448
Ivory Coast	—	5,512	5,512
Great Britain	661	50,265	50,926
Guadeloupe	441	220	661
Italy	4,850	1,323	6,173
Cameroons	22,487	22,046	44,533
Martinique	—	1,102	1,102
Netherlands	—	11,464	11,464
Austria	23,589	12,346	35,935
Switzerland	—	34,612	34,612
Spain	11,023	—	11,023
Czechoslovakia	—	28,660	28,660
Tunisia	11,023	—	11,023
Vietnam	75,397	—	75,397
Total	1,005,076	1,249,569	2,254,645

French hop exports for the calendar year 1960 = 2,638,686 lbs.

Austria

In the district of **MÜHLVIERTEL** the winter 1960/61 was mild. An uninterrupted period of rains persisted from the end of April until the middle of June so that especially **Downy Mildew** had to be controlled very carefully. 10 to 11 sprayings were effected on the average. During the later part of the growing season the weather became more favourable, but the plants could not entirely offset the lost growth.

The height of the trellises was generally reached at the beginning of July. **Bloom** started during the second half of July. Generally the plants did not show a good overhang and the vines remained mostly somewhat pointed. A stronger appearance of **Aphids** had to be controlled shortly before the harvest and **Hails** occasioned local damages.

Picking started on August 28th and was finished in mid-September under generally good weather conditions. No picking machines are in operation but there was only some local lack of labour. A total harvest of 104,700 lbs. was picked on an area of 116 acres (902 lbs. per acre).

The hops were judged better in colour and quality than the year before. The **Quality** was graded as follows: 75% Grade I, 22% Grade II, 3% Grade III. The entire crop was taken over by sponsoring breweries until the middle of December 1961.

In the district of **LEUTSCHACH** the hops did not suffer from weather conditions or pests and diseases during the entire growing period in 1961. The vines could develop well under somewhat changeable but generally good weather and reached the height of the trellises at the beginning of July. Up to 8 sprayings were effected against **Pests** and **Diseases**.

Bloom started by the end of July/beginning of August. Generally the vines had remained pointed and showed little overhang. The cones had ripened well on the lower third of the vines.

Picking started on August 20th and was finished under good weather conditions on September 8th. There was some lack of labour but up to now no picking machines have been installed.

The hops of crop 1961 were judged better in colour and formation of the cones than the year before. The quality was graded as follows: 82.3% Grade I, 13.1% Grade II, 4.6% Grade III.

On a total acreage of 131 acres (of which 3 acres new gardens) a crop of 240,146 lbs. was harvested (1,558 lbs. per acre). The entire crop was accepted by sponsoring breweries. Prices ranged from öS 48.— to öS 52.— per kilo (DM 370.— to DM 400.— per 50 kilos).

A warm spring in 1961 was followed by rainy weather from May until the middle of June. The weather continued changeable with rather much precipitations and good weather conditions started only at the beginning of the autumn. Precipitations were distributed as follows:

Switzerland

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
61	34	21	82	109	58	110	110	50	47	29	98 mm

The plants reached the height of the trellises at the beginning of July but showed little overhang and many vines had remained pointed. The hop yards suffered locally from **Hails**. Up to 8 and 10 sprayings had to be effected against **Downy Mildew**. The harvest was done from August 28th to September 12th. There was no lack of labour as 85% of the crop are picked automatically. The entire crop was judged of good quality.

A crop of 27,558 lbs. was harvested on an acreage of 25 acres including 2 acres new gardens (1,102 lbs. per acre). Sponsoring breweries took over all hops and paid sfrs 650.— per 50 kilos. Farmers received a payment of sfrs 590.— whereas the difference of sfrs 60.— per 50 kilos was paid into the Compensation Fund.

The weather in 1961 was more favourable for the development of the hops than in 1960. Hop yards showed a generally satisfactory stand. There were no diseases with the exception of a limited appearance of **Downy Mildew** in the district of Asturias. The hop acreages were increased as follows: Galicia 42 acres, León 69 acres, Asturias 94 acres. The following harvest results were obtained from a total hop acreage of 2,278 acres:

Spain

District	Acreage acres	Crop lbs.	Yield per acre lbs.
Galicia	605	291,228	481
León	1,364	832,347	610
Asturias	294	122,686	417
Vasco Navarra	15	4,079	272
Total	2,278 acres	1,250,340 lbs.	549 lbs.

The **Quality** of crop 1961 was judged very good in all districts of production. The yield, too, which was only 425 lbs. per acre in 1960 shows a satisfactory increase.

The hop yards which have been laid out on an experimental basis during the preceding years have been increased in the meantime. For 1961 a total area of 46 acres and a harvest of 50,700 lbs. has been indicated. (1,100 lbs. per acre).

Greece

The hops were off to a normal growth during the spring of 1961 after a wet winter 1960/61. The development suffered from hot and dry weather at the end of May and including the month of June, so that rainfalls were very necessary for the hop yards at the beginning of July. Rains, however, fell only late in July and at the beginning of August and were for that reason not of especial influence anymore for the development of the hops.

England

The quota of production for crop 1961 had been fixed at 103.5% in May 1961. Demand for crop 1961 had been registered as follows:

Home consumption	225,227 cwts.
Export	5,736 cwts.
	<u>230,963 cwts.</u>

The effective harvest in 1961 remained more than 10% under the above registration so that a corresponding necessity for imported hops arose. Picking started on August 28th and was finished under good weather on September 25th. As a consequence of the widespread mechanical harvest, there is no lack of labour.

The hops of crop 1961 had somewhat smaller sized cones and were somewhat more ripened than usual. Contents of lupulin corresponded about to the quality of last year.

The **Quality** was judged as follows: 24% Grade I, 51% Grade II, 25% Grade III. The average price to farmers was fixed at £ 37.10.— (DM 390.— per 50 kilos). Contracts for crop 1961 could be filled only to 78.3%. Registrations for the coming crop 1962 are as follows:

Home consumption	259,600 cwts.
Export	4,504 cwts.
	<u>264,104 cwts.</u>

The quota of production has been fixed at 119.5%. There are some doubts whether such a result can be obtained.

Exports of English Hops Crop 1961			
September 1st, 1961 — March 31st, 1962			
Country	cwts.	Country	cwts.
Australia	4,774	b. f.	16,091
Belgium	1,333	Malayan States	200
Brit. Honduras	10	Malta	65
Denmark	60	Nigeria	12
Fiji Islands	12	Pacif.-Islands	5
Finland	10	Portugal	26
Iraq	41	Singapore	300
Ireland	9,834	Sweden	16
Jamaica	16	Total	16,715
Kenya	1		
c. f.	16,091	1 cwt = 50.8 kilos	

English exports of hops crop 1960 until March 31st, 1961 = 16,316 cwts.

The following quantities of hops crop 1961 were imported from September 1st, 1961, to March 31st, 1962:

Country	cwts.	Country	cwts.
Germany West	4,715	b. f.	18,476
Belgium	3,004	Czechoslovakia	821
U.S.A.	2,274	Poland	1,003
Netherlands	374	France	648
Jugoslavia	8,109	Total	20,948
c. f.	18,476	1 cwt = 50.8 kilos	

English imports of hops crop 1960 until March 31st, 1961 = 9,494 cwts.

U.S.A.

CALIFORNIA. In the district of **SACRAMENTO** there were low temperatures and some **Frosts** during January and February 1962. **High Winds** appeared in March and **Spring Work** could only be effected in April under warmer weather conditions. Precipitations were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
3.11	1.19	2.02	0.49	0.13	0.02	—	—	0.17 inch.

Growth during the season 1961 could develop under favourable weather conditions with the exception of heavy **North Winds** in the beginning of the season. **Pests** and **Diseases** were no danger. Two and three sprayings were effected. Warm weather during May and June was favourable for the development of the plants. From July until harvest temperatures remained generally high.

The hops reached the height of the trellises at the beginning of July and were in **Full Bloom** around July 20th. Generally, the plants remained pointed and did not show any overhang. Cones ripened under good weather conditions by the end of August.

Picking started about mid-August and was finished within two to three weeks under favourable warm weather conditions. On the average, the cones had a good colour, but remained smaller in size as usual as a consequence of quick ripening under high temperature. This decreased the quantity of the harvest. The crop was judged as follows: 70% Grade I, 25% Grade II, 5% Grade III.

WESTERN OREGON. The hops were off to a slow start as a consequence of the wet spring with especially heavy rainfalls in March 1961.

Precipitations were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
4.79	10.82	8.19	3.19	2.44	0.30	0.96	0.28	0.91 inch.

Despite this late start, the hops could develop well under normal favourable weather conditions. The plants remained exceptionally free from pests as well as Downy Mildew. One spraying only was necessary against **Red Spider** and **Aphids**, and 2 or 3 preventive sprayings were sufficient against **Downy Mildew**. The plants reached the height of the trellises in mid-June and were in **Full Bloom** by the middle of July. The hops had developed well on the average, but laterals did not show as many cones as usual. The hops ripened normally.

Picking of Fuggles hops started in mid-August and was finished within a fortnight. The harvest of Clusters and other varieties went on between September 5th and September 25th. Weather conditions during the harvest were favourable. The **Quality** of the hops was considered good for all varieties. The crop was judged as follows: 50% Grade I, 40% Grade II, 10% Grade III.

EASTERN OREGON AND IDAHO. The weather was normal during the spring of 1961 and rainfalls were as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
0.42	1.20	1.39	0.22	0.54	0.55	0.25	0.21	0.79 inch.

During the further development of the vegetative season, the weather became very hot in part and **High Winds** damaged the harvest. **Premature Bloom** was to be noted locally and even the growth of the vines was hampered in hop yards without irrigation. Red Spider appeared stronger than usual as a consequence of the warm weather. Up to 5 sprayings were effected against **Aphids** and **Red Spider** and up to 4 sprayings against **Downy Mildew**.

The hops reached the height of the trellises around June 25th. **Bloom** started at that time on early Clusters and locally late varieties of Cluster hops showed premature Bloom. These late hops, however, continued to develop favourably and were in **Full Bloom** only in mid-July. Early Clusters remained somewhat pointed, whereas late hops showed a good overhang. Cones ripened well on the average but the very warm weather did not benefit the development of the cones.

Picking started around August 21st and was finished within 4 weeks under good weather conditions. The hops showed a good colour and a normal content of lupulin, even if the cones were not always developed so well as normally. On the total, the **Quality** was somewhat better than 1960. The crop was judged as follows: 60% Grade I, 35% Grade II, 5% Grade III.

WASHINGTON. In the district of **YAKIMA** the early development was delayed by cold and disagreeable weather in the spring of 1961. This resulted in a rather heavy infestation of **Downy Mildew** which had to be controlled very carefully. Warmer weather by the end of June was especially important to keep this disease in check. From that time on, the hops showed a normal growth. Rainfalls were distributed as follows:

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
0.55	2.46	2.04	0.86	0.96	0.52	0.25	0.22	— inch.

The summer of 1961 was rather hot which favoured the development of the hop yards. The initial delay in growth as a consequence of unfavourable weather in the spring was offset by a healthy development of the vines during the summer. At the start of the harvest, the crop showed good prospects. On August 15th and during the first week in September 1961 two very **Heavy Storms** with rain and **Hails** occurred. The result of the crop was reduced locally by these events and the quality suffered from **Wind Whipping**.

Aphids necessitated 2 sprayings only. A heavy infestation of **Two-Spotted Mites** favoured by extremely hot weather during the months of July, August and the beginning of September made four and more sprayings necessary.

The hops reached the height of the trellises during the first week in June. Early Clusters were in **Bloom** by mid-June whereas blooming started at the end of June on late Clusters. Generally the hops remained pointed, but had an ample set of well-ripened cones on the lower third of the vines.

Picking started around August 25th and was finished in mid-September under warm weather conditions. The harvest was locally hampered by **High Winds**.

Hops harvested before the storms were of uniformly green colour, whereas hops picked after the storms showed **Wind Whipping** and had lost part of the lupulin. The cones were well sized but had lost quality by the storms. The crop was judged as follows: 40% Grade I, 40% Grade II, 20% Grade III.

**Hop Market
U.S.A.**

The general weak tendency of the market since the harvest 1960 resulted in a continued decrease of contract prices for hops crop 1961, under slow market activity. The lackluster tendency of the market prevailed until the harvest in August 1961 despite the fact that the bulk of the hops was already under contract.

Events on the European hop markets coupled with a smaller result of crop 1961 in U.S.A. led to a notable upswing of prices in mid-September. Supplies of hops crop 1961 on farms were already sold out at prices up to 50/55 cents with the exception of small final lots at the end of September. Hops of older crops, which were briskly traded, demanded higher prices as well, whereas quotations for contracts crop 1962/65 for the time being remained unchanged at 36/38/40/40 cents per lb.

It is a special feature of the American market that after supplies on farms and in second hands have been sold out, hops are re-purchased from breweries so that new supplies constantly arrive on the market. Renewed demand in February 1962 resulted in considerable trading in this form which emptied the market — inclusive of stocks in breweries — to a considerable extent. In sympathy with a generally firmer market situation, the quotations for contracts rose about this time as well by about 6 cents per lb. The percentage of hops under contract of the coming crop is estimated as follows:

Crop 1962	90%
Crop 1963	75%
Crop 1964	60%.

**Hop Acreage
U.S.A.**

The disappointing pricing situation for hops crop 1960 had resulted in about 7,000 acres of hop yards having been left idle especially in the state of Washington. The upswing of prices since September 1961 stimulated production of hops again so that a considerable part of the idle yards was re-activated. This expansion is estimated at about 6,200 acres. A considerable increase of production, therefore, can be expected for hops crop 1962.

**Marketing
Agreement
U.S.A.**

Discussions regarding a new marketing agreement, which initially seemed without chance, appear now to become possible. A corresponding application has been signed by a sufficient number of farmers so that further discussions will take place.

Exports of US-Hops Crop 1961

September 1st, 1961 — February 28th, 1962

Country	lbs.	Ztr. je 50 kilos	Country	lbs.	Ztr. je 50 kilos
Ethiopia	11,023	100	b. f.	6,917,480	62,752
Afghanistan	55,000	499	Japan	598,586	5,430
Angola	22,019	200	Congo	109,279	991
Argentine	54,787	497	Mexico	1,878,380	17,041
Belgium-Luxembourg	206,424	1,873	Moçambique	26,547	241
Bolivia	47,300	429	Netherlands	206,299	1,872
Brazil	774,967	7,030	Norway	28,567	259
Brit. Guayana	7,528	68	Austria	101,362	920
Canada	1,320,542	11,980	Panama	55,850	507
Ceylon	23,200	210	Peru	400,197	3,631
Chile	293,921	2,666	Philippine Isl.	80,000	726
Colombia	849,660	7,708	Poland	155,286	1,409
Costa Rica	28,339	257	Portugal	13,122	119
Denmark	169,084	1,534	El Salvador	52,973	481
Germany West	1,530,590	13,885	Singapore	12,437	113
Dominican Republic	11,315	103	Union of South Africa	138,417	1,256
Finland	7,074	64	Sweden	44,691	405
Formosa	22,591	205	Switzerland	149,423	1,356
Great Britain	633,493	5,747	Trinidad	4,350	39
Guatemala	2,692	24	Czechoslovakia	1,940,503	17,604
Honduras	42,152	382	Uruguay	79,345	720
Hongkong	20,000	181	Venezuela	451,154	4,093
Indonesia	16,000	145	Other Countries	35,291	320
Ireland	665,098	6,034	Total	<u>13,479,539</u>	<u>122,285</u>
Israel	56,933	516			
Jamaica	45,748	415			
c. f.	6,917,480	62,752	110,23 lbs. = 1 Ztr. zu 50 kilos		

U.S. exports of hops crop 1960 until February 28th, 1961 = 13,847,864 lbs. (125,627 Ztr.)

Hop Imports U.S.A Crop 1961

September 1st, 1961 — February 28th, 1962

Country	lbs.	Ztr. je 50 kg
Belgium-Luxembourg	6,051	55
Germany West	1,665,520	15,109
Japan	105,689	959
Jugoslavia	1,798,392	16,315
Czechoslovakia	1,102	10
Total	<u>3,576,754</u>	<u>32,448</u>

U.S. imports of hops crop 1960 until February 28th, 1961 = 1,712,533 lbs. (15,536 Ztr.)

In Japan, hops are produced on the island Hondo in the districts of Nagano, Yamagata, and Fukushima and on the island Hokkaido. The total acreage of 2,461 acres included 272 acres new gardens.

In the district of **NAGANO** the weather was not especially favourable for hops during 1961.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
Precipitations	67.3	37.9	60.3	80.3	38.9	271.6	99.9	104.7	185.7 mm
Temperatures	-2.2	-1.4	3.1	10.7	17.3	19.8	25.6	25.0	22.5° C

Growth of the hops was good until May 1961. Later on, high temperatures and dryness did not benefit the vegetative development of the hops especially in low locations. About 7 to 9 sprayings against **Downy Mildew** and **Red Spider** were effected. The vines reached the height of the trellises in mid-June. Beneficial rains in June led to a recuperation of the hop yards especially in high locations. **Bloom** started during the second half of June, about 14 days premature, which resulted in a reduction of the crop. **Picking** started around July 25th and was finished under good weather conditions within 4 weeks. There were not sufficient pickers available.

In the district of **HOKKAIDO** the hops suffered from dryness.

	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.
Precipitations	65.4	33.4	48.4	26.6	114.5	5.7	324.7	100.0	116.0 mm
Temperatures	-11.4	8.5	3.1	4.6	12.3	17.8	22.0	21.1	18.4° C

The hops had advanced in development about 10 days as against normal years after favourable temperatures and sufficient rainfalls in April and May. Dry weather in June hampered growth and **Drought Damages** appeared locally. **Downy Mildew** as well as **Red Spider** had to be controlled carefully. Up to 10 sprayings were effected. The vines reached the height of the trellises during the last decade of June. **Bloom** started during the beginning of July but was not as plentiful as usual. Cones on the lower third of the vines had ripened better than in normal years. **Picking** started on August 10th and was finished under favourable weather conditions on August 31st. There were sufficient pickers available.

The **Quality** of the Japanese hops crop 1961 was average in colour and lupulin. The crop was graded as follows: 84.9% Grade I, 7.7% Grade II, 7.4% Grade III. About 20% of the harvest are handled by 1,800 small picking machines of Japanese construction.

The entire harvest was purchased by sponsoring breweries according to agreement. The average price was Yen 24,050.— per 50 kilos (DM 267.— per 50 kilos).

Australia

In **VICTORIA** rainfalls during the summer of 1960/61 were distributed as follows:

1960					1961		
Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Febr.	March
4.30	5.10	4.40	2.45	2.89	0.20	0.84	1.41 inch.

Extremely oscillating temperatures during the summer months led to a quick **Ripening** of the hops so that a part of the harvest had become overripe already before picking time. The hops were uniform in colour and the **Quality** generally was considered somewhat lower than that of last year. The harvest 1961 was 7,048 cwts. which corresponds to 1,700 lbs. per acre on a total area of 457 acres.

In **TASMANIA** the weather was favourable for the growth of the hops despite limited rainfalls during the summer of 1960/61. Varying locally, only between 8.5 inches (212.5 mm) and 10.5 inches (262.5 mm) of precipitations fell during the time from August 1st, 1960, until March 31st, 1961. From December 1960 until March 1961 the weather was generally too dry.

The hops reached the height of the trellises in mid-December and showed a good overhang, but the **Set** was not uniform. **Red Spider** appeared extensively, but control measures were insufficient. Less than 20% of hop yards were sprayed and even then only up to 2 sprayings were effected on the average. There was not sufficient spraying equipment available. It is to be regretted that **Verticillium Wilt** has been noted in almost all districts of production.

Picking started on February 21st, 1961, and was finished by the end of March. There are 2 picking machines in use, but 90% of the harvest are still picked by hand. There were not always sufficient pickers available. The weather during the harvest was warm and dry.

The **Quality** was judged equal to that of the year before. The price to farmers was sh 6/- per lb. (DM 370.— per 50 kilos) of dry hops and was on this basis unchanged against the year before. Despite damages by Red Spider, the crop was generally judged as Grade I, because off-quality lots had been abandoned.

New Zealand

The vegetative development of the hops during the summer of 1960/61 could progress well under favourable conditions at the beginning of November 1960 and under constant temperatures until mid-December. The weather was especially fine by the end of December and remained normal in January and February 1961. Rainfalls were distributed as follows:

1960					1961		
Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Febr.	March
1.90	8.12	4.98	1.93	0.80	7.16	5.10	4.95 inch.

The vines reached the height of the trellises during the second half of December and developed a good overhang. **Burrs** appeared in mid-January. Some infestation of **Red Spider** was noted during the final weeks before harvest and had to be controlled. One new hop garden which had formerly been planted to potatoes, showed first signs of **Verticillium Wilt** and was ploughed out immediately.

Picking started at the end of February and was finished by the end of March. Five picking machines are in operation but 90% of the harvest are still handpicked. There was not sufficient labour available. During the harvest, **Storms** occasioned local damages and some interruptions of picking by rains were experienced.

The cones of the hops crop 1961 were not very well formed and had only an average content of lupulin. Generally, the harvest was judged quite good. There was only a small quantity of off-quality hops.

Crop 1962

The following informations have been received up to now from the Southern hemisphere where hops are picked in March:

In **TASMANIA** climatic conditions were distinguished by dry weather during the season 1961/62. Despite this fact, the growth of the hops was surprisingly good. Especially in the **Derwent Valley** where 85% of hops in Tasmania are grown, a relatively dry winter was followed by weather deficient in rains, but damages could be avoided by irrigation. Rainfalls were distributed as follows:

Australia

	1961					1962		
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Febr.	March
New Norfolk	1.82	1.13	0.83	0.72	1.19	1.32	0.80	1.55 inch.
Bushy Park	2.18	1.52	0.88	0.85	1.29	1.11	0.90	1.52 inch.

Sprayings against **Red Spider** which appeared sporadically, had to be effected only in part of the hop yards. In some local places signs of **Verticillium Wilt** have been noticed.

The hops reached the height of the trellises in mid-December and developed a good overhang. Hop yards were in **Full Bloom** during the middle of January 1961. The vines did not show such a plentiful foliage as in other years so that the formation of the cones went on quite well. **Picking** started on February 24th and was finished on March 31st under favourable weather conditions. There were sufficient pickers available. Three picking machines handle about 10% of the harvest.

The **Quality** was judged better than the year before especially as there were no off-colour hops by damage from Red Spider. On a total area of 1,448 acres (of which 42 acres new gardens), a harvest of 25,573 cwts. has been picked (1,947 lbs. per acre). Higher wages and cost of picking led to an increased price of sh 6/6 per lb. (DM 400.— per 50 kilos).

There are no detailed news as yet from **VICTORIA**. Estimates up to now indicate that the crop 1962 will have resulted in a total of 7,000 cwts.

According to an interim report, a crop of around 2,250 cwts. has been harvested in March 1962. Initial expectations for a bigger crop were not realized. It has been said that the hop yards show a disease not observed until now after which the hop vines turn dry.

Union of South Africa

The winter of 1961/62 was relatively mild until December 1961 and brought ample precipitations. Severe frost weather which was only occasionally interrupted, started at the beginning of January and continued until the middle of March, 1962. During the second half of March and the first half of April, cold weather with excessive rainfalls and occasional **Frost** prevailed so that working the hop yards became exceedingly difficult and was retarded. On the average, the development of the hops during the first half of April was retarded about 3 weeks as against normal years.

Growth 1962 in Germany

HALLERTAU. Spring Work was delayed by unfavourable weather and came into full swing only during the first half of April. The hops had only small shoots. Warmer weather since mid-April benefited growth but the development was retarded against normal years. Hop yards could not offset this delay under changeable weather in May. Generally, however, the plants showed a healthy stand. Early preventive sprayings against **Downy Mildew** became necessary. The hop yards were carefully cultivated despite the unfavourable weather so that hop yards showed a well tended stand, even if growth was late. There were scarcely any signs of **Pests** and **Diseases**. The weather remained too cool until the first week in June 1962. Occasional local **Night Frosts** did practically no damage. Growth was much retarded and the vines showed a height of only between 1 and 3 m.

TETTANG. In this district, too, working the hop yards could not start until the beginning of April. Somewhat more favourable weather since mid-April benefited **Spring Work** which was finished during the first half of May. The development of the hops was hampered by a cold spell at the beginning of May. On the average, the vines were retarded by about two to three weeks. The Tettang district suffered especially from climatic conditions. The weather became more constant and sunny at the beginning of June but temperatures remained too low. The hops had reached a height between 1.50 to 3 m and occasionally until 3.50 m.

SPALT. The hop yards came well out of dormancy. The **Uncovering** and **Cutting** of the hops started sporadically during the beginning of April after constantly unfavourable weather. The plants were off to a retarded start. Spring work was finished generally about the end of April. A short warmer spell during the second half of April was again followed by unfavourable weather in May which hampered the growth of the plants. **Fleas** appeared locally and had to be controlled and preventive sprayings against **Downy Mildew** were effected. The hop yards were well tended and carefully fertilized. The stand of the hop yards was unequal with a height of the vines between 1.30/2.50 m and until 3 m in single cases. Temperatures became lower at the beginning of June and were occasionally rather near to freezing. Light **Night Frosts** did practically no damage.

HERSBRUCK GEBIRGE. Rough and wintry weather continued until the beginning of April so that only at this time **Spring Work** could start in some hop yards situated on light soils. The cultivation of the hop yards was finished until the end of April on the average. The hops benefited by warmer weather during the second half of April but changeable conditions until mid-May were not favourable for the development of the hop yards. Preventive sprayings were effected against **Fleas** and **Downy Mildew**. Strong rainfalls and low temperatures at the beginning of June furthermore retarded growth. The hops had reached a height from 1 m/2.50 m and showed a growth of 3 m in early uncovered hop yards.

Since June 10th, a profound change of weather conditions which had come just in time has fundamentally improved the aspects for the development of the hop yards within the last fortnight. High temperatures and welcome precipitations led to a healthy growth of the hops which amounted to 20 and 30 cm per day. The stand of the hop yards is strong and healthy everywhere and a good development of **Laterals** is to be seen. It is to be hoped that the favourable weather continues in order to benefit the bloom of the hops and the development of the plants until harvest time.

JOH. BARTH & SOHN