

# JOH. BARTH & SOHN, NÜRNBERG

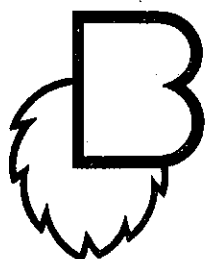
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**HOPS 1969·70**

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## Production of Beer 1969

Country	1000 bbl. of 31 gall. each	Country	1000 bbl. of 31 gall. each
Germany W. 71,567		b. f. . . . .	4,910
East*) 13,039	84,606	Kenya . . . . .	665
England . . . . .	45,999	Nigeria . . . . .	601
USSR*) . . . . .	30,791	Angola . . . . .	580
Czechoslovakia . . . . .	17,741	Cameroons . . . . .	511
France . . . . .	16,789	Algeria . . . . .	469
Belgium . . . . .	11,560	Rhodesia . . . . .	383
Spain . . . . .	10,286	Morocco . . . . .	298
Poland . . . . .	8,515	Mozambique . . . . .	294
Netherlands . . . . .	6,721	Ruanda-Burundi . . . . .	273
Austria . . . . .	6,318	Tanzania . . . . .	247
Denmark . . . . .	5,797	Ghana . . . . .	243
Jugoslavia . . . . .	5,071	Ethiopia . . . . .	213
Italy . . . . .	4,913	Ivory Coast . . . . .	187
Hungary . . . . .	4,173	Uganda . . . . .	179
Switzerland . . . . .	3,926	Egypt . . . . .	174
Sweden . . . . .	3,324	Tunisia . . . . .	141
Roumania . . . . .	3,260	Congo Brazzav. . . . .	136
Ireland*) . . . . .	3,238	Madagascar . . . . .	77
Bulgaria . . . . .	2,557	South West Africa . . . . .	70
Finland . . . . .	2,050	Centralafric. Rep.*) . . . . .	68
Norway . . . . .	1,128	Togo . . . . .	62
Greece . . . . .	869	Dahomey . . . . .	61
Portugal*) . . . . .	810	Sudan . . . . .	60
Luxembourg . . . . .	453	Senegal*) . . . . .	60
Malta*) . . . . .	30	Upper Volta . . . . .	42
Iceland . . . . .	21	Liberia . . . . .	34
<b>Europe</b>		Libya . . . . .	26
		Guinea . . . . .	14
	280,946	Other Countries . . . . .	72
U.S.A. . . . .	119,148	<b>Africa</b>	
Canada . . . . .	12,992	Japan . . . . .	23,288
Mexico . . . . .	11,348	Philippine Islands . . . . .	2,812
Brazil . . . . .	9,374	Vietnam . . . . .	1,193
Colombia . . . . .	7,755	China*) . . . . .	1,023
Venezuela . . . . .	3,324	South-Korea . . . . .	925
Argentina . . . . .	2,614	Malaysia*) . . . . .	511
Peru . . . . .	1,936	Taiwan*) . . . . .	511
Chile . . . . .	1,357	Thailand*) . . . . .	358
Cuba*) . . . . .	1,158	Turkey . . . . .	351
Puerto Rico*) . . . . .	1,012	Singapore . . . . .	296
Uruguay . . . . .	596	Indonesia . . . . .	213
Ecuador . . . . .	511	Israel*) . . . . .	213
Panama . . . . .	311	India . . . . .	213
Jamaica . . . . .	268	Hongkong . . . . .	162
Guatemala . . . . .	255	Iran . . . . .	158
Bolivia . . . . .	238	Okinawa . . . . .	136
Nicaragua . . . . .	238	Ceylon . . . . .	96
Dominican Republic . . . . .	178	Lebanon . . . . .	68
Honduras . . . . .	170	Iraq*) . . . . .	60
El Salvador . . . . .	139	Cyprus . . . . .	60
Trinidad a. Tobago . . . . .	118	Pakistan . . . . .	21
Paraguay . . . . .	109	Syria*) . . . . .	20
Costa Rica*) . . . . .	106	<b>Asia</b>	
Martinique . . . . .	17	Australia*) . . . . .	11,858
<b>America</b>		New Zealand . . . . .	3,557
	175,272	Tahiti . . . . .	64
Congo-Kinshasa . . . . .	2,178	<b>Australia/Oceania</b>	
Rep. of South Africa . . . . .	2,050	Total . . . . .	15,479
Zambia . . . . .	682		515,535
c. f. . . . .	4,910	*) = estimate	

## Crop 1968 (Supplement)

Complete figures of imports and exports of hops, crop 1968 during the period of September 1st, 1968, to August 31st, 1969, can now be stated as follows:

	Import	Export
Germany . . . . .	9,547,240 lbs.	17,495,044 lbs.
Belgium . . . . .	3,569,468 lbs.	2,325,633 lbs.
England . . . . .	1,793,001 lbs.	1,754,641 lbs.
U. S. A. . . . .	10,453,331 lbs.	17,000,773 lbs.
France . . . . .	2,401,691 lbs.	2,635,599 lbs.

As a consequence of active demand all stocks of crop 1968 could be transferred into consumption. Even remainders of former crops, which, in unimportant quantities were still available in the U.S.A. could be almost sold.

## Crop 1969

Under stagnating, even slightly regressing world acreage (— 0.1 %) the 1969 harvest was slightly higher (+ 3 %) than last year, while the world beer consumption increased by 6.1 %. The result was an evident recovery of the price level under steady sales of all hop provenances of crop 1969.

**Market  
Survey**

The attitude of the U.S. hop growers was again of special significance. First of all pronounced hop shortage and stronger price increases could be observed on the **U.S. market** because of their holding on to a policy of stringency. The diversification of world hop production from the U.S.A. with a share of 20 % (1966: 26.6 %) to Western Germany with at present 24 % (1966: 18.4 %) remained. Further acreage increases in the Federal Republic should strengthen this tendency in the future years.

The **German** harvest with about 450,000 cwts. could be sold without any difficulties because of favourable market conditions. Even the price increase since the **revaluation of the DM in October** did not present significant difficulties because the foreign producers seized the opportunity to increase their prices at the German revaluation rate.

The general recovery of hop prices could also succeed on the **contract market** for crops 1970/75. This constitutes the condition for acreage increases which to a limited extent are necessary in the interest of better supply for the world market.

The analytical characteristics of the crop year 1969 is the low bitter value of almost all European hop provenances while U.S. hops showed considerable higher values as against the year before.

**Bitter Values  
of Crop 1969**

Origin	Total resin content	Soft resins	%	Humu- lon %		Lupulon + Frac- tion of soft resin %		Hard resins %		Bitter value Wöflmer	
										1969	1968
Hallertau . . . . .	13.70	11.4	83.2	5.0	36.5	6.4	46.7	2.3	16.8	5.7	6.4
Hallertau/Nordbr. . . . .	20.00	17.3	86.5	9.2	46.0	8.1	40.5	2.7	13.5	10.1	11.3
Spait . . . . .	13.30	11.2	84.2	4.9	36.8	6.3	47.4	2.1	15.8	5.6	6.3
Tettwang . . . . .	13.50	11.5	85.2	5.3	39.2	6.2	46.0	2.0	14.8	6.0	6.4
Hersbruck . . . . .	13.60	11.1	81.6	4.9	36.0	6.2	45.6	2.5	18.4	5.6	6.5
Alsace . . . . .	12.10	9.9	81.8	4.5	37.2	5.4	44.6	2.2	18.2	5.1	6.9
Belgium/Brewers-Gold . . . . .	15.10	12.5	82.8	6.2	41.1	6.3	41.7	2.6	17.2	6.9	8.5
Saaz . . . . .	13.10	11.1	84.7	4.7	35.9	6.4	48.8	2.0	15.3	5.4	6.9
Jugoslavia/Styria . . . . .	13.30	11.3	84.9	6.3	47.3	5.0	37.6	2.0	15.1	6.9	6.9
Jugoslavia/Backa . . . . .	14.70	12.2	83.0	5.7	36.8	6.5	44.2	2.5	17.0	6.4	7.1
Yakima Seedless . . . . .	16.30	14.2	87.1	7.2	44.2	7.0	42.9	2.1	12.9	8.0	7.5

The figures of the above table refer to bitter value (as is, alpha evaluated conductometrically) only in the beginning of the season and will not hold good for the judgement of supplies in the later part of the year.

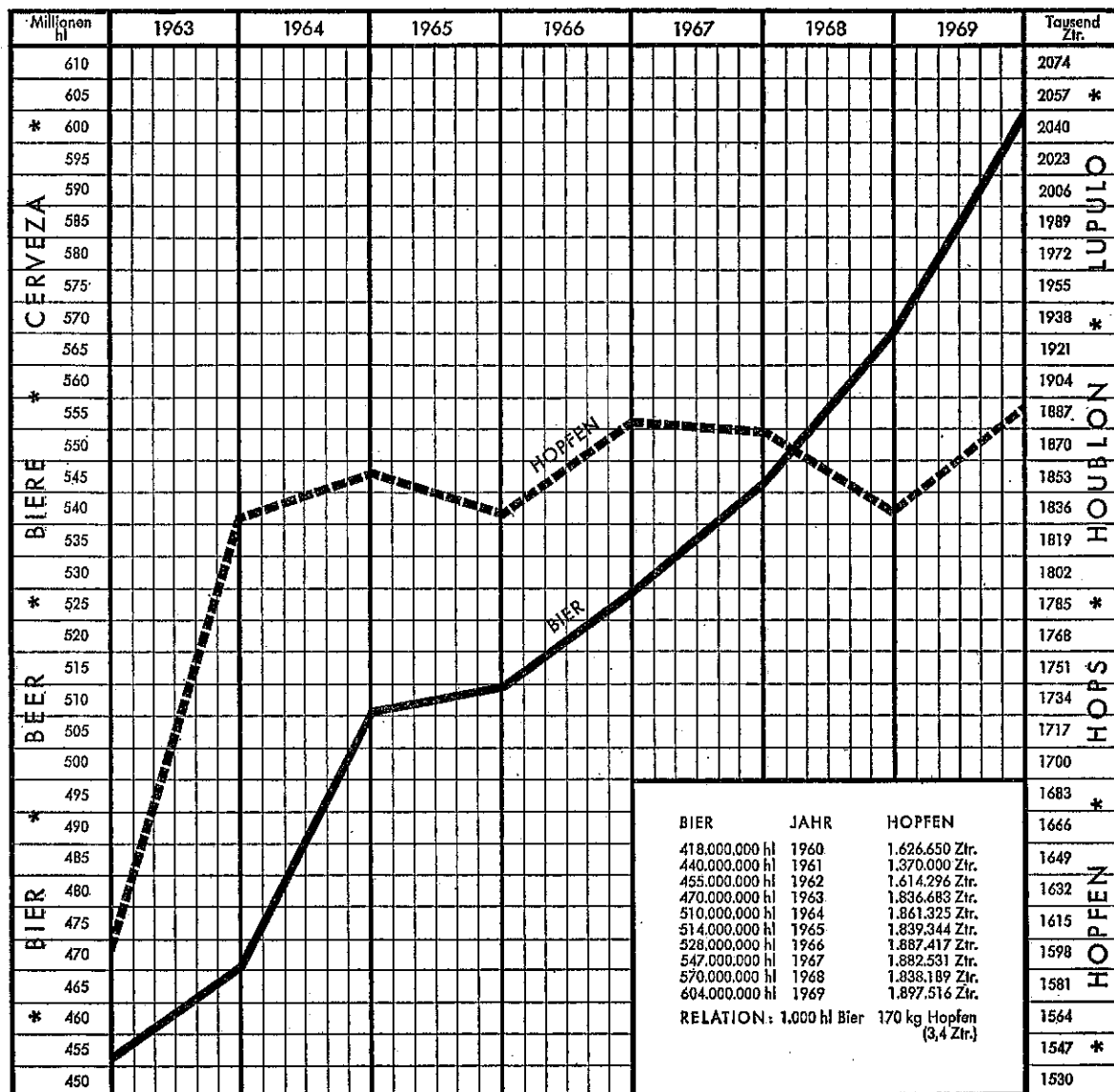
## Acreage, Yield and Production 1968 and 1969

Country	Acreage 1968 Acres	Yield Pounds per acre	Production 1968 Pounds	Acreage 1969 Acres	Yield Pounds per acre	Production 1969 Pounds
Hallertau . . . . .	22,350	1,704	38,078,623	23,348	1,687	39,377,353
Spalt . . . . .	2,622	1,544	4,047,535	2,473	1,419	3,508,180
Hersbruck . . . . .	1,045	1,236	1,291,675	877	1,586	1,390,992
Jura . . . . .	650	1,750	1,137,353	687	1,622	1,114,315
Tettngang . . . . .	2,310	1,524	3,520,085	2,318	1,895	4,392,445
Wurttemberg . . . . .	77	923	71,098	32	1,085	34,722
Baden . . . . .	59	1,147	67,681	59	1,508	88,956
Rheinpfalz . . . . .	47	797	37,478	35	1,008	35,274
<b>Germany (West) . . . . .</b>	<b>29,158</b>	<b>1,655</b>	<b>48,251,529</b>	<b>29,829</b>	<b>1,674</b>	<b>49,942,237 **)</b>
<b>Germany (East) . . . . .</b>	<b>5,327</b>	<b>917</b>	<b>4,885,394</b>	<b>5,182</b>	<b>1,319</b>	<b>6,837,567</b>
Saaz (Zatec) . . . . .	16,578	833	13,818,874	16,538	1,071	17,708,560
Auscha (Ustek) . . . . .	3,608	874	3,152,578	3,563	1,130	4,026,702
Other Districts . . . . .	1,433	1,104	1,581,800	1,483	1,087	1,611,452
<b>Czechoslovakia . . . . .</b>	<b>21,619</b>	<b>858</b>	<b>18,553,252</b>	<b>21,584</b>	<b>1,082</b>	<b>23,346,714</b>
Alsace . . . . .	2,471	1,256	3,103,415	1,833	1,721	3,154,783
Burgundy . . . . .	222	1,379	306,219	163	1,582	257,938
Flandres . . . . .	544	1,433	779,657	544	1,581	859,794
<b>France . . . . .</b>	<b>3,237</b>	<b>1,294</b>	<b>4,189,291</b>	<b>2,540</b>	<b>1,682</b>	<b>4,272,515</b>
Alost . . . . .	927	1,573	1,457,792	988	1,584	1,565,266
Poperinge . . . . .	1,754	1,592	2,793,228	1,791	1,754	3,141,555
Vodelée . . . . .	79	1,116	88,184	49	1,350	66,138
<b>Belgium . . . . .</b>	<b>2,760</b>	<b>1,572</b>	<b>4,339,204</b>	<b>2,828</b>	<b>1,688</b>	<b>4,772,959</b>
Slovenia . . . . .	6,353	1,044	6,632,539	6,279	1,188	7,461,358
Backa . . . . .	3,079	1,382	4,254,878	3,116	1,175	3,661,841
<b>Jugoslavia . . . . .</b>	<b>9,432</b>	<b>1,154</b>	<b>10,887,417</b>	<b>9,395</b>	<b>1,184</b>	<b>11,123,199</b>
<b>Austria . . . . .</b>	<b>267</b>	<b>1,194</b>	<b>318,895</b>	<b>259</b>	<b>1,321</b>	<b>342,154</b>
Galicia . . . . .	358	546	195,548	316	539	170,195
León . . . . .	1,829	1,368	2,501,890	2,061	1,091	2,248,141
Cantábrico . . . . .	284	875	248,458	368	532	195,768
<b>Spain . . . . .</b>	<b>2,471</b>	<b>1,192</b>	<b>2,945,896</b>	<b>2,745</b>	<b>952</b>	<b>2,614,104</b>
<b>Switzerland . . . . .</b>	<b>32</b>	<b>1,175</b>	<b>37,588</b>	<b>32</b>	<b>1,609</b>	<b>51,477</b>
<b>Roumania . . . . .</b>	<b>1,977</b>	<b>633</b>	<b>1,251,111</b>	<b>1,977</b>	<b>633</b>	<b>1,251,111</b>
<b>Bulgaria . . . . .</b>	<b>2,891</b>	<b>384</b>	<b>1,108,914</b>	<b>2,965</b>	<b>446</b>	<b>1,322,760</b>
<b>Hungary . . . . .</b>	<b>1,433</b>	<b>590</b>	<b>846,015</b>	<b>1,433</b>	<b>680</b>	<b>974,323</b>
<b>Poland . . . . .</b>	<b>5,476</b>	<b>809</b>	<b>4,431,246</b>	<b>5,832</b>	<b>638</b>	<b>3,721,365</b>
<b>USSR . . . . .</b>	<b>25,451</b>	<b>801</b>	<b>20,392,550</b>	<b>25,451</b>	<b>801</b>	<b>20,392,550 *)</b>
Kent . . . . .	9,671	1,165	11,266,939	9,111	1,487	13,548,359
Hants/Surrey . . . . .	675	1,409	951,175	610	1,306	796,742
Sussex . . . . .	1,559	1,185	1,848,006	1,433	1,363	1,953,386
Herefordshire . . . . .	4,085	1,349	5,510,818	4,020	1,287	5,174,306
Worcestershire . . . . .	1,927	1,408	2,713,863	1,544	1,293	1,996,045
<b>England . . . . .</b>	<b>17,917</b>	<b>1,244</b>	<b>22,290,601</b>	<b>16,718</b>	<b>1,404</b>	<b>23,468,738</b>
<b>EUROPE . . . . .</b>	<b>129,448</b>	<b>1,118</b>	<b>144,728,904</b>	<b>128,770</b>	<b>1,209</b>	<b>154,433,773</b>
Washington . . . . .	19,101	1,510	28,841,018	18,100	1,560	28,235,966
Oregon . . . . .	4,500	1,480	6,659,986	4,201	1,250	5,249,924
California . . . . .	1,500	1,660	2,489,985	1,500	1,550	2,324,971
Idaho . . . . .	3,299	1,740	5,741,991	3,200	1,860	5,951,979
<b>U.S.A. . . . .</b>	<b>28,400</b>	<b>1,540</b>	<b>43,732,980</b>	<b>27,001</b>	<b>1,547</b>	<b>41,762,840</b>
<b>Canada . . . . .</b>	<b>954</b>	<b>1,571</b>	<b>1,498,797</b>	<b>966</b>	<b>1,662</b>	<b>1,605,169</b>
Victoria . . . . .	600	1,341	804,679	714	1,605	1,146,172
Tasmania . . . . .	1,478	2,033	3,004,980	1,604	1,933	3,099,998
<b>Australia . . . . .</b>	<b>2,078</b>	<b>1,833</b>	<b>3,809,659</b>	<b>2,318</b>	<b>1,832</b>	<b>4,246,170</b>
<b>New Zealand . . . . .</b>	<b>610</b>	<b>1,327</b>	<b>809,309</b>	<b>610</b>	<b>1,682</b>	<b>1,025,911</b>
<b>Japan . . . . .</b>	<b>4,610</b>	<b>1,572</b>	<b>7,246,630</b>	<b>4,253</b>	<b>1,252</b>	<b>5,325,432</b>
Manchuria . . . . .	247	402	99,207 *)	247	402	99,207 *)
Northern-Korea . . . . .	1,235	143	176,368 *)	1,235	143	176,368 *)
Argentina . . . . .	610	658	401,237	544	567	308,644
South Africa . . . . .	336	379	127,426	306	587	179,675
<b>WORLD . . . . .</b>	<b>168,528</b>	<b>1,202</b>	<b>202,630,517</b>	<b>166,250</b>	<b>1,258</b>	<b>209,163,189</b>

\*) Estimate

\*\*) Official Weight March 7th, 1970

World  
Production  
Beer and Hops



A cool and wet spring, favourable weather conditions in early summer, a hot and sunny midsummer as well as not always ideal weather in August provided the conditions for a quantitative large, however qualitative not too heavy hop crop 1969.

FED. REP. OF  
GERMANY  
Growth 1969

Owing to unfavourable weather in March **uncovering** and **cutting** could not be started until the beginning of April. Cool weather and showers of snow in mid-April delayed spring work. Gradually rising temperatures at the end of April and warmer weather during the first half of May favoured growth of the hops. Early appearance of **Downy Mildew** could be kept under control through immediate sprayings. Against **aphids** preventive sprayings were effected.

Ample precipitations and a drop of temperatures at the beginning of June caused a temporary stillstand of the growth which, however, was equalized by fine weather until the end of month. The hops reached the height of the trellises in due time during the first half of July and showed plentiful healthy **laterals** with abundant burr.

Mid-July high summerly weather set in and favoured the further development of the hop yards and especially the **formation of the cones**. Some thunderstorms together with hail as well as high winds caused local damages in the hop growing districts. Continuous hot weather during the first half of August led to damages through dryness on lighter soils. As a consequence of high temperatures **Downy Mildew** had come to a stillstand. Intensive sprayings, especially against an attack of **aphids** and **Red Spider** had to be applied.

Frequent rainfalls since mid-August benefited indeed the formation and a dense set of cones, however, the ripening could not take place in a desirable manner on account of cool weather.

**Picking** started sporadically on August 25th, 1969 and was in full swing at the end of the month. Favourable weather conditions at the beginning of September speeded up the bringing in of the crop, so that in all districts picking was finished until mid-September.

**HALLERTAU.** Especially favourable weather conditions during the growing period of the hops effected a large crop. On July 17th, 1969 the districts of Geisenfeld and Neustadt/Donau were struck by a hailstorm, the consequences of which, however, were less evident than those of the year before. **Verticillium Wilt** appeared once again in all districts of the Hallertau very strongly, causing an estimated loss of approximately 20—25.000 cwts.

**Quality.** Hallertau hops, crop 1969 had middling-sized cones of green colour. The light lupulin had a fine, intense aroma, but the bitter value was somewhat lower than the year before. Whereas the picking of the hops gave partly reason for complaints, the drying was generally irreproachable.

**SPALT.** As a consequence of the lasting heat and dryness the hops, especially in this district, were seriously threatened. Rainfalls in time at the end of August benefited the formation of the cones, so that an average crop could be harvested which had not been expected anymore.

**Quality.** The cones of Spalt hops showed an uneven growth, the light-yellow lupulin had a fine aroma, the bitter value was lower than the year before. Whereas the drying of the hops was generally satisfactory, the machine picking should be still improved.

**TETTANG.** High summerly weather and sufficient precipitations favoured the formation of the cones and the ripening of the hops accomplishing all conditions for a qualitative and quantitative record crop. Pests and diseases were kept successfully under control.

**Quality.** Tettang hops of crop 1969 had middling-sized cones and yellowish-green colour with occasional wind-whipping. The light-yellow lupulin was of fine and mild aroma. The bitter value was only somewhat lower than the year before. Picking and drying gave reason for complaints in some cases only.

**HERSBRUCKER GEBIRGE.** In this district, too, the weather was marked by an extraordinary dryness. Only in the second half of August plentiful precipitations provided the soil moisture necessary for the development of the cones. Therefrom profited especially the late varieties which brought forth a higher yield. Apart from some local damages through storm and hail, the stand of the hops was good.

**Quality.** The cones of the Hersbruck Gebirge hops, crop 1969, were of middling-sized growth and green colour. The light lupulin had a fine and spicy aroma. Whereas kilning was generally satisfying, machine picking could be still improved.

**Crop Estimate  
1969**

The Crop Estimating Commission established the following figures:

	Yield estimated 1969 lbs.	Yield weighed on March 7th, 1970 lbs.
Hallertau . . . . .	37,147,510	39,377,352
Spalt . . . . .	3,527,360	3,508,179
Tettang . . . . .	3,968,280	4,392,445
Hersbruck Gebirge . . . . .	1,267,645	1,390,992
Jura . . . . .	1,102,300	1,114,315
Wurttemberg . . . . .	38,580	34,722
Baden . . . . .	77,161	88,955
Rheinpfalz . . . . .	27,557	35,273
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	47,156,393	49,942,233

With regard to agricultural products, an error in estimating of 6 % is within the range of a good estimate. It has to be considered that the task of the Estimating Commission is complicated by the existence of unregistered acreage, by not exactly determinable crop losses caused by *Verticillium Wilt* as well as different yields of newly planted hop varieties in the Hallertau.



Since first weighing results were lower than expected, apprehensions were expressed that the officially fixed estimate figure was too high. According to newspaper publications the Bavarian Government had made available an amount of 4 million DM to support the market, provided that the price for Hallertau hops, crop 1969 paid to farmers would drop below DM 300.— per cwt.

Purchase set in unusually early right after picking had started. At the end of September a noticeable consolidation of the market was observed. By steady lively activity all German districts were sold out at an early date.

**HALLERTAU.** At the beginning of the harvest already first purchases were effected at DM 286.—. Growers, however, generally remained reluctant, as first of all forward contracts had to be delivered. By mid-October the delivery of hops under contract could be terminated. During the second half of November still free available hops went into second hand. The development of prices was as follows:

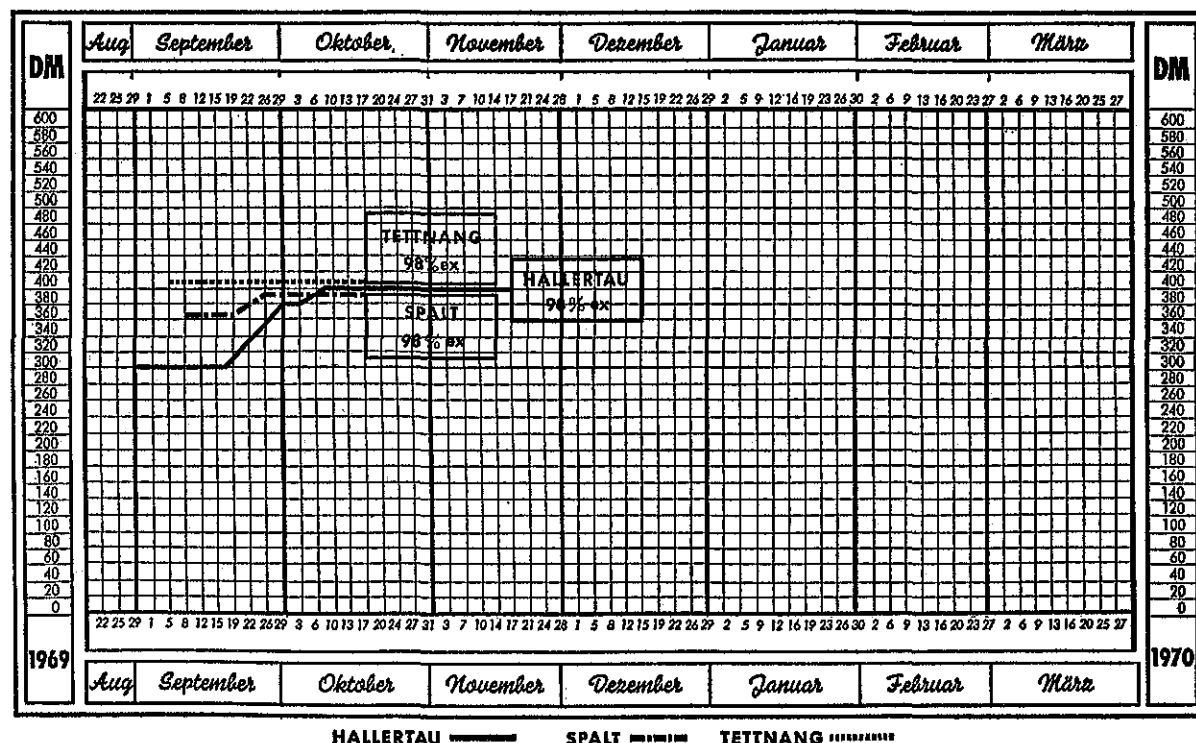
	9/10	9/15	9/20	9/25	9/30	10/1
DM	286.—	286.—	305.—	333.—	352.—	381.—

The last-mentioned quotation was valid until the sellout of the district. Only sporadically higher prices could be obtained by farmers.

**SPALT.** Because of varying prices Spalt hop growers showed only little interest in selling their surplus hops. Free available lots were almost sold out on September 25th, 1969. Prices developed as follows:

	9/10	9/15	9/20	9/25	9/30	10/1
DM	362.—	362.—	381.—	381.—	400.—	400.—

The weighing of the hops was nearly finished on October 2nd, small remaining lots were still traded at DM 410.—. On October 10th, the quotations were nominal at DM 429.—, but no more offers existed.



**TETTANG.** Due to an above-average crop farmers were willing to sell. As a consequence of steady lively demand, free available hops were almost sold out on September 25th, and on October 1st, the official crop estimate was already exceeded.

Whereas right after the beginning of the harvest first purchases were effected at DM 381.—, farmers could only obtain DM 362.— during the following days. At the beginning of September dealers even paid only DM 333.—. The reluctance of the producers observed at this time, led to a stillstand of purchasing. From September 10th on, the following quotations developed:

	9/10	9/15	9/20	9/25	9/30	10/1
DM	362.—	362.—	362.—	381.—	381.—	381.—

Customers took over remaining lots at prices up to DM 410.—. The district was sold out at the end of October.

**HERSBRUCK.** On account of small offers first purchases were made on August 25th at DM 257.—. This quotation was effective until the end of September. Then a sudden rise of prices took place as the following table shows:

	9/10	9/15	9/20	9/25	9/30	10/1
DM	257.—	257.—	257.—	286.—	305.—	333.—

Sporadically farmers obtained DM 362.—, the main share of free available hops, however, was traded at DM 333.—. At the end of October the district was practically sold out.

As prices paid to farmers in the Hallertau never dropped under a level of DM 300.— but, on the contrary, steadily increased until the district was sold out, no intervention on the hop market was necessary.

All quotations as mentioned above are net prices plus added value tax, and refer to hops ex stocks of farmers.

## Nuremberg Market

In contrast to previous years business on the market started early. The small offers of Spalt hops on farms led to deals already at the beginning of September 1969 on the base of DM 395.—. In the middle of the month active trading with Hallertau hops set in and at the end of September a general demand for all varieties started, which, however, could not be satisfied entirely. Corresponding to purchases on farms the Nuremberg Market noticed a sensible price raising. The quotations developed as follows:

Date	Hallertau	Spalt	Tettwang	Hersbruck
9/17/69	DM 330.—/335.—	398.—/410.—	415.—/420.—	305.—/315.—
9/24/69	385.—	435.—	445.—	340.— nominal
10/ 1/69	400.—	460.—	460.—	385.—
10/ 8/69	435.—	465.—/455.—	450.—	400.—
10/15/69	425.—	455.—	450.—	390.—
10/30/69	425.—	—	—	—
11/ 7/69	425.—	450.—	450.—/435.—	—
11/14/69	428.—	445.—	435.—	380.—
12/30/69	410.—/415.—	430.—	425.—/430.—	365.— nominal

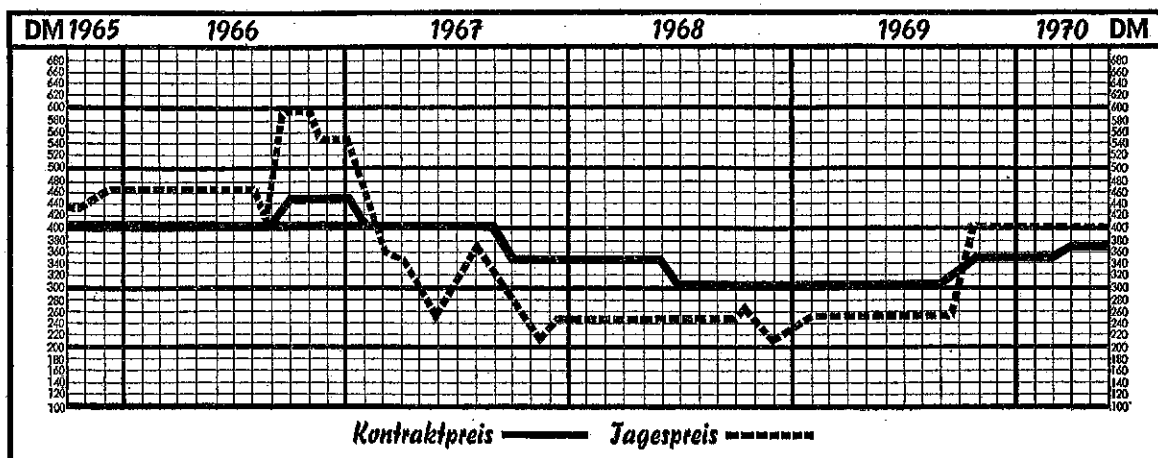
The rapidly advancing clearance of all growing districts directed the continuous lively demand until the middle of October for mostly Hallertau and Spalt hops on the Nuremberg Market. Then the demand declined considerably, with only sporadic trading, mostly in Hallertau hops. This quiet tendency remained for several weeks and active trading started again only towards the end of the year.

In the following months still available stocks continued to decrease with barely changed prices. Slight concessions in quotations for Hallertau hops to DM 400.— in March were followed by a renewed rise of prices to DM 415.—/425.— for the last remaining lots in April 1970. They consisted mostly of repurchases from breweries. By the end of April the Nuremberg Market was no longer able to supply hops of crop 1969.

Since November 1969 an active interest in forward contracts was to be noticed on the Nuremberg Market, especially for Hallertau hops crop 1970 which were mostly traded in connection with later years. Since February 1970, however, there were no more offers for crop 1970 alone.

The above quotations are per 50 kilos net, plus added value tax, packing excluded, ex warehouse.

Current- and Contract (3—5 years) prices in the Hallertau



Districts	1960 Acreage acres	1969		
		Existing acr. acres	Additional acr. acres	Total acres
Hallertau . . . . .	14,344	22,303	1,045	23,348
Spalt . . . . .	2,258	2,409	64	2,473
Hersbruck . . . . .	1,376	857	20	877
Jura . . . . .	440	625	62	687
Tettngang . . . . .	1,791	2,276	42	2,318
Wurttemberg . . . . .	376	32	—	32
Baden . . . . .	74	57	—	57
Pfalz . . . . .	62	35	—	35
Other Districts . . . . .	47	32	—	32
<b>Germany . . . . .</b>	<b>20,768</b>	<b>28,626</b>	<b>1,233</b>	<b>29,859</b>

**Hop Acreage  
1969**

As the Hop-Provenience-Law does not refer to hop varieties grown in the different districts, no exact information is available regarding the share of hop varieties with a high bitter value in the Hallertau.

On October 25th, 1969, the new Federal Government decreed the expected revaluation of the DM of 8.5 % (foreign exchange converted into DM 9.3 %) effective since October 27th, 1969. The Stabilization Law was at the same time repealed.

**Revaluation  
Compensation  
Law**

Since payment for agricultural products in the EEC which are made subject to market regulations in compensation units (so-called Green Dollars) the German agriculture suffers a loss of profit which according to official calculations amounts to 1.7 billion Marks yearly. After tough negotiations, the Ministry Council of the EEC authorized the Federal Government to pay to German farmers complete compensation preliminarily for four years (1970/73). For this purpose a limited and graduated contribution is to be made from the EEC agricultural funds. The development of the German agriculture is to be examined before the end of the last fiscal year.

The annual 1.7 billion DM has to be raised with 920 million government subsidy from budget resources and 780 million by raising the added value tax for agricultural products.

The Revaluation Compensation Law was published in Federal Law Journal No. 134 on December 31st, 1969, effective since January 1st, 1970. Accordingly, at the first turnover level the added value tax has been raised from 5 % to 8 % and at the next trade level it remains as in the former regulation. Since the producers are able to deduct the 8 %, no payments are being made to the Revenue Offices.

	Total in lbs.	Percentage of Total	
		German Export	Export „in bond“
1967 9/1/67 — 8/31/68	1,555,580	31.10 %	68.90 %
1968 9/1/68 — 8/31/69	1,978,646	46.20 %	53.80 %

**Export of  
Hop Extracts**

Since January 1st, 1970 the Tariff Union of the EEC became effective, informations concerning German export and transit can only be given for third party countries. This leads to a distorted picture, so that in the future export of extract will only be shown in the export statistics.

### Hop Imports Crop 1969

From September 1st, 1969, until March 31st, 1970, hops were imported as follows:

Country	Domestic Consumpt.	Refinement transit	Country	Domestic Consumpt.	Refinement transit
	lbs.	lbs.		lbs.	lbs.
U. S. A. . . . .	772,271	339,729	b. f. . . . .	5,246,948	4,599,457
Jugoslavia . . . . .	1,204,373	1,586,430	Spain . . . . .	—	360,011
Czechoslovakia . . . . .	1,330,697	1,207,239	Poland . . . . .	—	257,497
Belgium-Luxembourg . . . . .	953,710	563,055	Austria . . . . .	—	49,824
France . . . . .	985,897	903,004	Other Countries . . . . .	16,975	54,895
c. f. . . . .	5,246,948	4,599,457	Total . . . . .	5,263,923	5,321,684

Imports crop 1968 until March 31st, 1969 = 3,750,024 lbs. / transit 4,606,293 lbs.

### Exports of Hops/ Powder and Extracts Crop 1969

From September 1st, 1969, until March 31st, 1970, exports of Hops/Powder and Extracts were as follows:

Country	Hops/Powder lbs.	Extract lbs.	Country	Hops/Powder lbs.	Extract lbs.
France . . . . .	1,168,218	316,360	b. f. . . . .	14,156,949	1,125,887
Austria . . . . .	582,235	61,067	Mozambique . . . . .	28,660	6,834
Italy . . . . .	577,605	230,822	Algeria . . . . .	24,251	—
Great Britain . . . . .	541,009	13,668	Ruanda-Burundi . . . . .	23,369	3,307
Sweden . . . . .	520,947	30,203	Togo . . . . .	19,400	—
Belgium . . . . .	514,333	27,778	Rep. of South Africa . . . . .	11,684	48,060
Denmark . . . . .	502,208	59,965	Ethiopia . . . . .	11,023	2,425
Finland . . . . .	436,511	15,432	Zambia . . . . .	9,039	—
Switzerland . . . . .	410,496	93,475	Morocco . . . . .	7,716	—
Czechoslovakia . . . . .	395,285	—	Gabun . . . . .	6,614	441
Spain . . . . .	364,861	89,507	Ivory Coast . . . . .	5,512	—
Netherlands . . . . .	209,437	117,285	Sudan . . . . .	4,409	—
Norway . . . . .	202,823	3,527	Upper Volta . . . . .	4,409	—
Portugal . . . . .	83,775	—	Ghana . . . . .	3,307	12,125
Ireland . . . . .	38,801	—	Senegal . . . . .	3,307	882
Malta . . . . .	15,432	—	Reunion . . . . .	3,307	—
Europe . . . . .	6,563,976	1,059,089	Congo-Brazzav. . . . .	2,205	661
U.S.A. . . . .	6,921,342	14,109	Nigeria . . . . .	—	18,298
Venezuela . . . . .	206,791	—	Africa . . . . .	629,194	149,251
Brazil . . . . .	182,761	661	Japan . . . . .	1,088,631	1,102
Argentina . . . . .	106,923	—	South-Vietnam . . . . .	254,190	52,910
Canada . . . . .	50,265	—	Thailand . . . . .	157,408	—
Mexico . . . . .	35,715	—	Taiwan . . . . .	102,514	—
Uruguay . . . . .	33,951	10,362	Philippine Isl. . . . .	65,477	—
Bolivia . . . . .	20,944	220	South-Korea . . . . .	55,115	—
Nicaragua . . . . .	11,133	—	Hongkong . . . . .	50,485	—
Martinique . . . . .	11,023	1,543	Iran . . . . .	31,305	661
Panama . . . . .	8,818	—	Turkey . . . . .	22,046	—
Trinidad a. Tobago . . . . .	3,307	220	Birma . . . . .	13,889	—
Chile . . . . .	—	39,683	Cyprus . . . . .	7,716	—
America . . . . .	7,592,973	66,798	Cambodia . . . . .	6,614	7,716
Canary Islands . . . . .	153,220	—	Ceylon . . . . .	4,409	1,102
Kenya-Uganda . . . . .	108,907	—	Asia . . . . .	1,859,799	63,491
Angola . . . . .	90,609	13,228	Amer. Oceania . . . . .	28,660	—
Congo-Kinshasa . . . . .	46,297	42,990	Australia . . . . .	28,660	—
Madagascar . . . . .	33,289	—	Other Countries . . . . .	19,841	14,110
Tanzania . . . . .	28,660	—	Total . . . . .	16,694,443	1,352,739
c. f. . . . .	14,156,949	1,125,887			

Exports crop 1968 until March 31st, 1969 = Hops/Powder 15,004,839 lbs. / Extracts 1,415,574 lbs.

### EUROPEAN ECONOMIC COMMUNITY (EEC)

According to obligations signed in 1957 the Ministry Council had to come to a decision as regards to Market Regulations for agricultural products until 1970. Under the pressure of lacking time tough negotiations were held in December 1969 which led the EEC out of its stagnation and the road towards its final status was cleared. This was possible because of agreement within the Ministry Council regarding distribution of the financial burdens.

Upon acceptance of the Wine Market Regulation in April 1970, the issue of agricultural financing in the EEC could be solved also. The last obstacle to start EEC membership negotiations with other countries — England, Ireland, Denmark and Norway — was thus removed. The first discussions are supposed to start this summer already.

Nevertheless there are retardations in some areas. The initiation of a uniform added value tax for instance, had to be postponed till January 1st, 1972. Another problem are the already consummated commercial treaties between different member states and Eastern block countries, as they do not consider the EEC as an economic unit. Under current conception bilateral agreements will have to remain for the next three years.

For the special cultivation **Hops**, the initiation of a hop market regulation is planned too. As reported, the German delegation, however, was ready to forego a market regulation as long as other countries would assume the same position regarding other agricultural products. The German side, however, was outvoted and France as well as Italy claimed for additional market regulations. The Federal Republic therefore, will insist on a hop market regulation, too, and its being in effect as of crop 1971 is within the realm of possibility.

**Hop Market  
Regulation**

Since January 1st, 1970, the so far collected **domestic tariffs** on hops have been eliminated. When passing the custom border merely the import taxes in force in the respective countries have to be paid. The corresponding regulations for the shipment of merchandise within the EEC were uniformly imposed and simplified.

**Tariff  
Union**

Since January 1st, 1970, upon entry of **hops from third party countries** into the Common Market, a common foreign tariff reduced from 10.8 % to 10.2 % is to be paid, whereby equalization with EEC products through tariff protection is accomplished.

The accomplishment of **spring work** was delayed by rather variable weather in April. Extremely cool weather with abundant rainfalls in May causing a setback in growth of the plants, could be largely equalized by favourable weather conditions in June. **Downy Mildew** and the strong appearance of **aphids** had to be carefully controlled. High summerly temperatures at the beginning of July until mid-August together with stormy precipitations favoured the further development of the hops. Merely in the vicinity of Halle/Magdeburg where precipitations were scarce, hop yards had to be irrigated. Generally the hop yards showed an uniform growth and a rich set of cones.

**DEUTSCHE  
DEMO-  
KRATISCHE  
REPUBLIK  
(D.D.R.)**

**Picking** started on August 25th, and was finished on September 15th under fine weather. As in the years before there was lack of labour for the hand-picking.

**Quality.** The cones were even in growth. The bitter value was lower as against the year before. The crop was graded as follows: 3 % of grade II, 44 % of grade III and 53 % of grade IV. In as much as only unimportant hop quantities being exported, the crop was almost exclusively available for the local brewing industry. Import had not changed against the year before.

On account of bad weather **uncovering** and **cutting** could not be started until the end of April. Fine and sunny weather benefited first of all the growth of the plants, but this development was slowed down again in the first days of June. The hops reached the height of the trellises at the beginning of July and stood in full **bloom** by mid-July. Whereas the appearance of **Downy Mildew** was less evident, **aphids** had to be intensively controlled. Because of lasting favourable weather conditions till mid-August, especially the **formation of the cones** was benefited. Warm nights and precipitations in the second half of August led to an unexpected increase of the yield, so that the largest crop of the past **35 years** could be obtained.

**CZECHO-  
SLOVAKIA**

**Picking** set in on August 21st and was finished on September 10th under excellent weather. 368 picking machines were in action and harvested about 56 % of the crop. Due to the increasing mechanisation of the hop picking, the demand for pickers is steadily declining.

**Quality.** The cones were of middling size and even green colour, but the content of lupulin, however, was lower than the year before. The crop was graded as follows: 82 % of grade I and 18 % of grade II.

The home brewing industry accepted 99,600 cwts. of hops, part of which was converted into extract. In addition 8,000 cwts. of hops crop 1969 were imported, exports amounted to 121,000 cwts.

## POLAND

Unfavourable climatic conditions marked the growing period in 1969. **Spring work** was hampered by cold and rainy weather in April. Warm and sunny weather in May effected a quick growth of the plants which, however, was retarded by abundant precipitations and noticeable cooling off at the end of June. A severe **thunderstorm** at the beginning of July damaged about 20 % of the acreage. Until mid-August lasting dry and sunny weather led to a strong attack of **aphids** which could not be controlled despite of application of approved spray materials. The crop result was considerably reduced.

**Picking** set in on August 25th and was finished on September 15th under relatively fine weather. There was lack of pickers.

**Quality.** As a result of the unfavourable climatic conditions the cones were of uneven growth, yellowish-green colour and occasionally with blemishes. The bitter value was lower than the year before. The crop was graded as follows: 84.1 % of grade I, 15.3 % of grade II and 0.6 % of grade III.

A quantity of about 3,940 cwts. was exported whereas 1,760 cwts. were imported.

## HUNGARY

The favourable climatic conditions during the growing period until the end of June especially benefited **early varieties**, which also ripened on the lower part of the bines. On the other hand cool and rainy weather retarded the development of the cones of **late varieties** which proved disadvantageous for the quality. With the exception of strongly appearing **Oidium** causing local damages, pests and diseases could be controlled in time.

Whereas the **picking** of the early varieties was delayed by bad weather from the 5th -until the 25th of August, the harvest of the late varieties could be concluded in time.

**Quality.** The early varieties were judged better than the year before, the cones of the late varieties, on the contrary, remained small. The crop was graded as follows: 29.8 % of grade I, 26.8 % of grade II and 43.4 % of grade III.

The whole crop was consumed by the Hungarian State Brewery. To cover the demand, an additional quantity of 8,000 cwts. was imported in 1969.

## JUGOSLAVIA

In the **SANNTAL (SLOVENIA)** spring work was done in time. Very warm and sunny weather until the end of June benefited the growth of the plants which, in general, had reached the height of the trellises at this time. On account of unimportant precipitations during this period, the bines remained pointed and had shorter laterals. Ample rainfalls at the beginning of July favoured the further development of the hops. Preventive sprayings against **Downy Mildew** and a strong attack of **Red Spider** had to be effected. High temperatures at the end of July as well as in the first half of August affected the uniform formation and ripening of the hops. Precipitations in due time enabled a good crop.

**Picking** started on August 17th, and was finished at the beginning of September. Lasting rainfalls complicated the bringing in of the crop. About 18 % of the hops were picked by machines.

**Quality.** The cones of Styrian hops crop 1969 were of unequal size, even-green colour and had a high content of lupulin. The crop was graded as follows: 92.93 % of grade I, 6.42 % of grade II and 0.65 % of grade III. The home brewing industry received 12,257 cwts. of hops, 55,432 cwts. were exported.

**BACKA.** Lasting warm weather and abundant rainfalls from June till the end of July favoured the spreading of **Downy Mildew** and **Red Spider**, so that on the average 9 sprayings were necessary. Heavy **thunderstorms** during the period from July 1st till August 25th with high winds up to 160 km/h destroyed to some extent entire hop yards, causing an estimated loss of about 8—10,000 cwts. of hops.

**Picking** started on August 25th and could be finished under windy and rainy weather on September 15th. About 22 % of the crop was harvested by 17 picking machines. A complete change to machine-picking is intended.

**Quality.** The cones were of middling-sized growth, green colour with occasional wind-whipping. The bitter value of the previous year could not be obtained. The crop was graded as follows: 84.56 % of grade I, 13.37 % of grade II and 2.07 % of grade III. The acreage in the Backa of 3,116 acres is supposed to be enlarged in the next 5 years to 3,780 acres.

Exports amounted to a total of 28,420 cwts., whereas the home brewing industry received 4,800 cwts.

In the district of **MUEHLVIERTEL** spring work was strongly hampered by snowfalls and cold weather. Warm weather in May caused a vigorous and quick growth of the hops. Already at this time preventive sprayings against **aphids** and **Downy Mildew** had to be effected. In June also the development of the plants made further good progress, so that the bines had reached the height of the trellises by the end of the month. The hops stood in **bloom** by mid-July and had only a fair overhang. A hot spell lasting from July till the first half of August hampered the formation of the hops and caused damages through **dryness**, especially on light soils. Abundant rainfalls since mid-August still produced an ample set of cones, even covering the lower third of the bines.

## AUSTRIA

**Picking** started on August 25th and was finished on September 13th by continuous fine weather. For the first time a picking machine was in action and as a result, there was no lack of labour during the short harvest-time.

The hops of crop 1969 were in colour and **quality** remarkably better than the year before. The crop was graded as follows: 97 % of grade I and 3 % of grade II. Home breweries paid for first quality Austrian Sh. 2,700.— and for grade II Austrian Sh. 2,380.— per 50 kilos.

On 86 acres, a crop of 118,938 lbs. (1,384 lbs. per acre) was harvested.

In the district of **LEUTSCHACH** favourable weather conditions prevailed during the entire growing period. The relatively insignificant appearance of Downy Mildew and aphids could be successfully controlled. From the usual hailstorms the district was exempted. Despite a bad weather period in the second half of August, for the first time the 2,000 cwt. limit was passed. **Picking** started at the end of August and was finished on September 10th under constant rainfalls. The bringing in of the crop was extremely complicated by muddy soils in the hop yards.

As a consequence of the bad weather during the harvest the **quality** of the past year could not be reached. The hops were graded as follows: 70.2 % of grade I, 19.8 % of grade II and 10 % of grade III.

The entire crop was accepted according to contracts by the home brewing industry. On an acreage of 173 acres, a crop of 223,215 lbs. (1,290 lbs. per acre) was harvested.

The growth of the hops was generally characterized by favourable weather conditions and was especially benefited by high summerly temperatures with thundershowers during the months of July and August. The plants had a vigorous overhang and showed a better **set of cones** than the previous year. As a consequence of hot weather the appearance of Downy Mildew was quite scarce, whereas **aphids** had to be controlled with special attention.

## SWITZERLAND

**Picking** lasted from August 21st till September 10th, and was made difficult by abundant precipitations during the first few days. The total crop was picked by machines.

**Quality.** The cones were good in colour, but somewhat uneven in growth. The whole crop was classified as grade I. On an acreage of 31 acres, a crop of 51,477 lbs. (1,660 lbs. per acre) was harvested.

The price to farmers was standardized at Sfrs. 540.—, Sfrs. 60.— of which had to be paid into the Compensation Fund.

## SPAIN

In general the weather in 1969 was not too favourable. In the second half of July extremely strong rainfalls and high temperatures during the day were the reason for a heavy attack of **Downy Mildew** in all three growing districts causing considerable losses, especially in the district of León. Immediately started control measures favoured by good weather in July, prevented a further spreading of diseases and pests. Despite of all the crop suffered a drawback of about 3,000 cwts. as against the year before.

**Picking** started on August 16th and was finished on September 20th under good weather. 30 % of the crop was picked by machines, for the remaining quantity sufficient pickers were available.

**Quality.** The crop was graded as follows: 88 % of grade I, 11.8 % of grade II and 0.2 % of grade III. Prices paid to farmers remained unchanged.

Acreages and yield were as follows:

District	Acreage acres	Crop lbs.	Yield per acre lbs.
Zone I — Galicia	316	170,195	539
Zone II — León	2,061	2,248,140	1,091
Zone III — Cantábrica	368	195,768	532
Total	2,745	2,614,104	2,952

- For crop 1970 an extension of the acreage of about 309 acres is planned.

## Cultivation of Varieties

The share for the different hop varieties grown in Spain, was for crop 1969 as follows:

Variety H-7	20.2 %	Hallertau roots	7.75 %
Variety H-3	36.5 %	Striesselspalter	29.35 %
Variety H-15	0.1 %	Golding	6.1 %

Varieties H-3, H-7 and H-15 are hybrids grown in the country. The cultivation of Golding hops is decreasing furthermore. Also the variety Striesselspalt should be replaced by high-yielding varieties because of overaged hop yards.

## FRANCE

In **ALSACE** spring work was strongly affected by bad weather conditions in March/April. **Downy Mildew** and **aphids** had to be controlled very early. High summerly weather in July stimulated the plants vigorously, so that generally at this time the height of the trellises was reached. The yards stood in full **bloom** at the end of July. The **formation of the cones** was favoured through constant nice weather conditions. Since mid-August the high temperatures were replaced by ample precipitations being advantageous for the formation of the cones and the **ripening** of the hops, thus leading to a quantitatively and qualitatively good crop.

**Picking** started on September 2nd and was finished under sunny and warm weather on September 20th. The crop was harvested by 225 picking machines.

**Quality.** The cones were of unequal size and even green colour. The bitter value of the Alsace hops was lower than the year before. The crop was graded as follows: 90 % of grade I, 6 % of grade II and 4 % of grade III. The purchase prices for free hops were between FF 350.— and FF 400.—. The district was sold out at the end of November.

In **FLANDRES** **uncovering** and **cutting** was delayed by a cool and wet spring. Against **Downy Mildew** and **aphids** sprayings had to be effected once a week since April. The hop yards reached the height of the trellises on July 8th and showed a small overhang. According to variety **bloom** set in at the end of July, beginning of August. Continuing warm weather with several rainfalls favoured the formation of the cones and the **ripening** of the hops.

**Picking** started on August 28th and was finished by constant fine weather at the end of September. The total crop was harvested by 50 machines.



Quality and colour of the hops was judged better than in 1968. The crop was graded as follows: 60 % of grade I, 35 % of grade II and 5 % of grade III. Prices paid to farmers for free hops developed as follows:

		9/1	9/15	10/1	10/15	11/1
Brewers Gold	FF	400.—	400.—	450.—	500.—	550.—
Northern Brewer	FF	500.—	500.—	600.—	650.—	700.—

The district was sold out at the end of December 1969.

Figures published by the Statistical Bureau of the Ministry of Agriculture show that as against 1965, in Alsace and Burgundy the hop acreage is retrograde by about 20 %, whereas in the district of Flandres an extension by nearly 40 % has taken place.

### Cultivation of Varieties

As well as in other hop growing districts a reduction of the number of farmers is observed on one side, whereas the average cultivated hop acreage per farm has been increased.

For 1969 the cultivation of varieties in France is indicated as follows:

Variety	Striesselspalt		Northern Brewer		Brewers Gold		Others		Total	
	acres	%	acres	%	acres	%	acres	%	acres	%
Alsace	1,680	91.6	8	0.5	4	0.2	141	7.7	1,833	100
Flandres	—	—	221	40.7	248	45.7	74	13.6	543	100
Burgundy	32	19.7	15	9.1	32	19.7	84	51.5	163	100

Alsace: As to the 140 acres specified under "Others", about 134 acres are being allotted to the variety Record, high in bitter value, which, as well as Northern Brewer, shows a rising share.

Flandres: The variety Brewers Gold has already a dominating position whereas other varieties (Fuggles and Hallertau hops) are disappearing.

In 1969 France imported:

### Hop Imports 1969

Country	lbs.	Country	lbs.
Germany (West)	896,170	b. f.	1,557,991
Jugoslavia	385,364	Belgium-Luxembourg	93,255
Czechoslovakia	276,457	U. S. A.	28,880
c. f.	1,557,991	Total	1,680,126

French hop imports for the calendar year 1968 = 2,671,314 lbs.

Export of French hops in 1969 were as follows:

### Hop Exports 1969

Country	lbs.	Country	lbs.
Germany (West)	2,505,987	b. f.	3,062,630
Belgium-Luxembourg	356,925	Switzerland	7,275
U.S.A.	104,278	New-Caledonia	4,850
Algeria	37,699	Gabun	4,409
Congo (Brazzaville)	22,266	Cambodia	3,307
Spanish North Africa	22,046	Norway	1,102
Cameroons	14,329	Other Countries	441
c. f.	3,062,630	Total	3,083,794

French hop exports for the calendar year 1968 = 1,863,988 lbs.

In the district of **ALOST** the plants came relatively well through the mild and moderately wet winter, with the appearance of root rot in some areas only. Changeable weather in May and June affected the growth of the hops unfavourably. Careful control measures against **Downy Mildew**, **Oidium** and **aphids** had to be repeated almost every ten days. Dry and hot weather from July till mid-August stimulated the varieties Hallertau, Saaz and Tettnang to an unusual abundant growth. Contrary to this the development of Northern Brewer and Brewers Gold tending more to wet weather conditions, was affected. After a long-lasting hot spell, constant rainfalls in the second half of August provided a good formation of the hops.

### BELGIUM

**Picking** started on August 25th and was finished within 3 weeks under fine weather conditions. The entire crop was harvested by machines.

**Quality.** The cones were developed normally, of green colour and showed occasional wind-whipping only. The crop was graded as follows: 90 % of grade I and 10 % of grade II.

**POPERINGE.** As a consequence of unusually cool and wet weather hops showed only a slow development until the end of April. Warm and sunny weather in May, interrupted by a short period of rain at the beginning of June, caused quick growth, so that the bines reached the height of the trellises at the beginning of July. Whereas **Downy Mildew** and **Oidium** could be kept under control by regular sprayings, the control of the strongly appearing **aphids** caused great difficulties. On account of hot weather in July/beginning of August the variety Northern Brewer remained pointed whereas the variety Replant Hallertau showed a vigorous overhang. The **ripening** of the cones was benefited by favourable weather at the end of August.

**Picking** started generally on the 1st and was finished on the 20th of September. With the exception of the first week the crop was harvested under dry weather conditions by 150 picking machines.

**Quality.** Not considering the content of lupulin, growth and colour of the cones was better than the year before. The crop was graded as follows: 75 % of grade I, 24 % of grade II and 1 % of grade III.

#### Market Development

At the beginning of September prices to farmers for Northern Brewer amounted to FB 5,000.— (DM 365.85), rose till the beginning of October to FB 6,000.— (DM 439.—) and, as a consequence of increased demand, reached FB 6,500. (DM 475.60) at the beginning of November. The price development for Replant Hallertau and Brewers Gold was similar. Quotations for these varieties were FB 3,500.— (DM 256.—) on September 1st, increased to FB 4,500.— (DM 329.30) at the beginning of October and reached FB 5,000.— (DM 365.85) at the end of the month. With the exception of about 150 cwts. the hop growing district was sold out at the end of November.

#### Cultivation of Varieties

Concerning the development of the cultivation of varieties the following summary can be stated:

Variety	1962	1966	1967	1968	1969
Replant Hallertau . .	55 %	25 %	17 %	14 %	11 %
Replant Saaz/Tettnng.	6 %	1 %	1 %	1 %	—
Northern Brewer . .	19 %	40 %	42 %	45 %	46 %
Brewers Gold . . .	15 %	33 %	40 %	40 %	43 %

#### Hop Imports Crop 1969

Belgium imported the following quantities of hops, crop 1969 from September 1st, 1969 until December 31st, 1969:

Country	lbs.	Country	lbs.
Czechoslovakia . . . . .	882,942	b. f. . . . .	1,662,047
Germany (West) . . . . .	278,441	Poland . . . . .	60,626
France . . . . .	204,587	Germany (East) . . . . .	49,603
Jugoslavia . . . . .	155,865	Great Britain . . . . .	34,392
U. S. A. . . . .	140,212	Spain . . . . .	13,007
c. f. . . . .	1,662,047	Total . . . . .	1,819,675

Belgian hop imports crop 1968 until December 31st, 1968: 1,648,820 lbs.

#### Hop Exports Crop 1969

Exports of Belgian hops from September 1st, 1969, until December 31st, 1969 are shown as follows:

Country	lbs.	Country	lbs.
Germany (West) . . . . .	997,802	b. f. . . . .	1,397,716
Great Britain . . . . .	173,722	Denmark . . . . .	5,070
U. S. A. . . . .	129,630	Nepal . . . . .	5,070
Sweden . . . . .	59,965	Portugal . . . . .	4,850
Kenya . . . . .	15,432	Finland . . . . .	4,409
France . . . . .	7,937	Cameroons . . . . .	4,189
Netherlands . . . . .	6,614	Norway . . . . .	2,205
Mozambique . . . . .	6,614	Pakistan . . . . .	1,984
c. f. . . . .	1,397,716	Total . . . . .	1,425,494

Belgian hop exports crop 1968 until December 31st, 1968: 1,390,437 lbs.

The weather conditions, particularly in **South-Eastern Districts** were excellent for the growth. During the hot summer, the so important rains for the further development of the hops fell between mid-June and mid-July, an appearance which was not observed during the past 30 years in England. The **West Midlands** were not quite so fortunate, as the hops did not get the rains until later and had already suffered accordingly. Whereas Downy Mildew and Oidium could be controlled by regular sprayings, the control of **aphids**, strongly appearing without interruption until shortly before the crop, caused extreme difficulties.

**Picking** started at the beginning of September and was finished within 4 weeks. Apart from a few rainy days the weather during the harvest was dry.

**Quality.** As a result of the good weather during the summer months colour and content of lupulin were better than the year before. The crop was graded as follows: 33 % of grade I, 66 % of grade II and 1 % of grade III. The average price to producers was fixed at 33.12.0.

Concerning the development of the cultivation of varieties in England the following figures were published:

**Cultivation of Varieties**

Year	Goldings	Golding varieties	Fuggles	Others
1962	19.0 %	6.8 %	62.5 %	11.7 %
1967	21.8 %	10.8 %	52.9 %	14.5 %
1968	19.1 %	11.4 %	53.0 %	16.5 %
1969	19.8 %	13.8 %	42.3 %	24.1 %

Owing to the increasing demand of the brewing industry for hop varieties with a high alpha content, the portion of Fuggles has decreased to 42.3 %, whereas "Others" rose to 24.1 %. The breweries showed a considerable interest for the varieties "Bramling Cross" and "Progress", which are predicted to be promising varieties for the future.

The following quantities of hops crop 1969 were imported from September 1st, 1969 to March 31st, 1970:

**Hop Imports Crop 1969**

Country	cwts.	Country	cwts.
Jugoslavia . . . . .	7,043	b. f. . . . .	17,820
Germany (West) . . . . .	4,280	Australia . . . . .	171
Belgium . . . . .	2,847	Switzerland . . . . .	118
Canada . . . . .	1,868	Ireland . . . . .	99
U.S.A. . . . .	604	Bulgaria . . . . .	89
Poland . . . . .	551	Netherlands . . . . .	75
Czechoslovakia . . . . .	352	New Zealand . . . . .	69
Denmark . . . . .	275	Total . . . . .	18,441
c. f. . . . .	17,820	1 cwt. = 50.8 kgs	

English imports of hops crop 1968 until March 31st, 1969 = 15,597 cwts.

The following quantities of hops crop 1969 were exported from September 1st, 1969 to March 31st, 1970:

**Hop Exports Crop 1969**

Country	cwts.	Country	cwts.
Ireland . . . . .	12,766	b. f. . . . .	14,364
Belgium . . . . .	692	Denmark . . . . .	18
Malta . . . . .	468	U. S. A. . . . .	17
Nigeria . . . . .	273	Fiji-Islands . . . . .	14
Germany (West) . . . . .	165	Other Countries . . . . .	8
c. f. . . . .	14,364	Total . . . . .	14,421
		1 cwt. = 50.8 kgs	

English exports of hops crop 1968 until March 31st, 1969 = 13,693 cwts.

## U.S.A.

**CALIFORNIA.** In the district of **Sacramento** the growth of the hops was hampered by cool weather till the end of June. This setback could not be equalized, even by following good weather. The stand of the bines was not as good as in the previous year, the cones could not ripen on the lower third. On the average the hops had to be sprayed three times as a precaution against pests and diseases.

**Picking** started on August 14th and was finished by good weather on September 6th.

The **quality** of the hops was generally judged good and graded as follows: 70 % of grade I, 30 % of grade II.

**WEST-OREGON.** During the growth hops suffered under extremely warm weather conditions. As a consequence of premature bloom the bines remained pointed, so that the yield was considerably decreased. Local damage occurred through **Red Spider**.

**Picking** started on August 1st and was finished on September 10th. During this time excellent weather speeded up the bringing in of the crop.

**Quality.** The cones were of even growth, good colour and were judged as follows: 30 % of grade I, 45 % of grade II and 25 % of grade III.

**EAST-OREGON and IDAHO.** In this district the plants could develop well as a consequence of favourable climatic conditions. Especially early varieties showed in general an excellent stand, so that in spite of a reduced acreage, a larger crop could be obtained as against the year before. On the average four sprayings against **Downy Mildew** and about two/three sprayings against **Insects** were effected.

**Picking** started on August 20th and was finished under good weather on September 21st.

As to colour and formation of the cones, the **quality** of the hops was judged better than the year before. The crop was graded as follows: 85 % of grade I, 14 % of grade II and 1 % of grade III.

**WASHINGTON.** In the district of **Yakima** fine weather in May favoured the growth of the hops which, however, was slowed down by cold weather in June, July. Especially the bines of early Clusters were not as strong as usual and remained relatively pointed. Hot weather in August benefited the appearance of **Red Spider** to such an extent that farmers were not in a position to control this pest. This damage led to a further reduction of the crop.

**Picking** generally set in on August 15th and was finished by dry and cool weather on September 20th.

**Quality.** The uneven cones were of yellowish-green colour, but in respect to the bitter value higher than the previous year. The crop was graded as follows: 25 % of grade I, 50 % of grade II and 25 % of grade III.

## Hop Market U.S.A.

The yields of the American hop crop 1969 disappointed in all hop growing districts with the exception of Idaho and remained 5 % below the result of the past year. Unfavourable climatic conditions in August, a loss of 35 % of the Fuggle-crop as a consequence of premature bloom, as well as lower weighing results not only of the Bullions but also of early Yakima hops, were the reason for this reduction.

As a result of this setback and the consequently limited offer for 1969 hops, there was a lively demand for free available quantities in September. The price development started at 65 cents plus premium and already reached 70 cents plus premium in October. At this time the districts of Idaho, Oregon and California were sold out. In Washington available supplies were reduced to about 2,500 bales and because of the firm attitude of farmers, there was only little activity until the end of the year.

The firm prices of the free market as well as a noticeably scarce hop supply could not be without influence on **future contracts**. Special interest was noticed for crops 1970 and 1971.

The following table shows the development of the prices:

District	Crops	Prices in cents plus premium		
		Oct. 1969	Dec. 1969	March 1970
Washington	1970/71/72/73	70/68/68/—	72/70/70/69	80/77/77/72
Idaho	1970/71/72/73	73/71/71/—	—/73/73/72	—/—/—/75
Oregon (Fuggles)	1970/71/72/73	—/80/—/—	—/87/87/85	—/—/93/95
Oregon (Bullions)	1970/71/72	—/68/65	—/70/67	—/73/72

As reported in all growing districts the crops 1970/71/72 are sold out. Also crop 1973 is supposed to be under contract up to 85 % already.

Due to the urgent demand for U.S. hops the **Hop Marketing Control Board** decided on February 24th, 1970 in Portland to **increase** the quota for crop 1970 from **75 % to 80 %**. Likewise an additional quota of **1 million lbs. Fuggle hops** (approx. 9.000 cwts.) was granted for the period of 6 years to overcome the great shortage of this variety.

By means of the deliberately created shortage of hops, higher prices for farmers could be obtained. On the contrary, however, the delivery ability on the world market was considerably reduced. As statistics show, the gravitation for supplying the world market with hops, has shifted from the U.S.A. to Europe.

From September 1st, 1969 until March, 31st, 1970, imports of hops were as follows:

Country	lbs.	cwts. p. 50 kg
Belgium-Luxembourg . . . . .	305,476	2,771
Canada . . . . .	151,349	1,373
Germany (West) . . . . .	7,181,608	65,151
France . . . . .	490,466	4,450
Jugoslavia . . . . .	2,698,987	24,485
<b>Total . . . . .</b>	<b>10,827,886</b>	<b>98,230</b>

**Hop Imports  
Crop 1969**

From September 1st, 1969 until March, 31st, 1970, exports of hops and extracts were as follows:

Country	Hops lbs.	Extract lbs.	Country	Hops lbs.	Extract lbs.
Germany (West) . . . . .	1,342,822	36,927	c. f. . . . .	9,058,040	878,312
Ireland . . . . .	606,045	—	Nicaragua . . . . .	13,338	—
Belgium-Luxembourg . . . . .	197,973	22,707	British Guiana . . . . .	12,015	—
Denmark . . . . .	105,931	22,156	Netherl.-Guiana . . . . .	6,504	—
Great Britain . . . . .	87,853	—	Chile . . . . .	3,086	2,425
Netherlands . . . . .	58,201	257,056	Barbados . . . . .	2,976	1,102
Italy . . . . .	37,809	4,409	El Salvador . . . . .	—	3,748
France . . . . .	29,652	—	Costa Rica . . . . .	—	2,315
Norway . . . . .	13,338	772	<b>America . . . . .</b>	<b>6,568,385</b>	<b>462,194</b>
Greece . . . . .	13,007	—	Nigeria . . . . .	152,889	—
Switzerland . . . . .	12,015	48,501	Mozambique . . . . .	49,273	—
Sweden . . . . .	12,015	—	Rep. of South Africa . . . . .	47,509	1,984
Poland . . . . .	10,913	—	Congo-Kinshasa . . . . .	44,312	—
Spain . . . . .	—	33,179	Ethiopia . . . . .	24,030	—
<b>Europe . . . . .</b>	<b>2,527,574</b>	<b>425,708</b>	Cameroons . . . . .	19,952	—
Canada . . . . .	2,100,853	—	Sierra Leone . . . . .	19,290	—
Mexico . . . . .	1,709,667	304,786	Ghana . . . . .	—	5,511
Brazil . . . . .	1,452,942	—	<b>Africa . . . . .</b>	<b>357,255</b>	<b>7,495</b>
Argentina . . . . .	329,698	28,329	Japan . . . . .	365,853	—
Peru . . . . .	265,875	—	Malaysia . . . . .	92,703	5,512
Colombia . . . . .	197,201	80,137	Thailand . . . . .	33,179	—
Bolivia . . . . .	125,662	—	Israel . . . . .	25,243	9,039
Jamaica . . . . .	104,719	—	South-Korea . . . . .	12,015	—
Dominican-Republic . . . . .	63,272	—	Pakistan . . . . .	6,614	220
Venezuela . . . . .	56,658	36,155	Singapore . . . . .	—	16,535
Paraguay . . . . .	54,564	—	Hongkong . . . . .	—	2,204
Guatemala . . . . .	37,699	3,197	<b>Asia . . . . .</b>	<b>535,607</b>	<b>33,510</b>
Trinidad . . . . .	31,856	—	Other Countries . . . . .	8,598	7,716
c. f. . . . .	9,058,040	878,312	<b>Total . . . . .</b>	<b>9,997,420</b>	<b>936,624</b>

**Hop/Extract  
Exports  
Crop 1969**

## CANADA

In the district of **KAMLOOPS** the cool spring and the extremely hot months of May/June were unfavourable for the development of the hops. Only on account of moderate temperatures and some abundant rainfalls in July, the hops reached the height of the trellises and showed a good overhang. Lasting favourable weather in August benefited the **formation of the cones** and the **ripening** of the hops, so that a good crop could be obtained.

**Picking** started on September 3rd and was finished under fine weather on September 26th.

The **quality** of the hops was much better than the year before. The total crop was judged grade I.

In the district of **SARDIS** unfavourable climatic conditions prevailed during the growing period of the hops, but still a satisfying crop could be harvested. To control **Downy Mildew** and **Red Spider**, one spraying had to be effected once a week.

**Picking** lasted from August 26th till October 4th and was especially hampered by steady rainfalls.

**Quality.** Colour and content of lupulin were judged very good. The crop was graded as follows: 95 % of grade I, 3 % of grade II, 2 % of grade III. On a total acreage of 966 acres a crop of 1,605,169 lbs. (1,661 lbs. per acre) was harvested. The whole crop was taken over by the home breweries who are owners of the hop yards.

## JAPAN

According to present informations unfavourable weather conditions prevailed in the districts of **NAGANO** and **HOKKAIDO** during the growing period. Especially the low temperatures and the high humidity in August prevented a good **ripening** and closing of the cones. Damages caused by **typhoons** at the end of August as well as losses due to diseases and a spraying material wrongly dosed by the manufacturer essentially contributed to the weakest Japanese hop crop in the past five years.

**Picking** started at mid-August and was finished at mid-September under occasional interruptions by rain. 90 % of the crop were picked by machines.

**Quality.** The cones were of small growth. The bitter value of the past year could not be reached. The crop was judged as follows: 82.7 % of grade I, 9.7 % of grade II and 7.6 % of grade III.

According to contracts the breweries accepted the hops at the following prices:

Grade I	\$ 118.— per 50 kilos (DM 431.80)
Grade II	\$ 101.50 per 50 kilos (DM 371.50)
Grade III	\$ 85.— per 50 kilos (DM 311.10)

On account of the lower crop and the continually rising beer production, the import demand as to foreign hops for the season 1969/70 is estimated to be about 26,000—30,000 cwts.

## ARGENTINE

In the districts of **RIO NEGRO** and **NEUQUEN** hops generally could develop well. At the beginning of November the bines reached the height of the trellises. Downy Mildew and Red Spider were controlled in time. In January 1969 a **dry spell** set in, causing insufficient irrigation of the hop yards. Also on the lower part of the bines, the cones ripened well.

**Picking** lasted unusually long from the end of February till the beginning of April, as in March the bringing in of the crop was hampered by strong winds and rain. 95 % of the hops were picked by machines.

The **quality** of the crop 1969 was equivalent to that of the past year. 80 % were judged grade I and 20 % grade II. Prices paid to farmers were slightly higher than 1968.

The district of the **PROVINCE BUENOS AIRES** suffered from unfavourable weather conditions, especially during spring. The setback existing since the beginning of the growth, could not be recovered later. The **Verticillium Wilt** appeared on about 15% of the acreage. Eight sprayings against **Downy Mildew** were necessary.

**Picking** lasted from March 12th to March 22nd 1969. The small crop of 19,841 lbs. which had grown on hop yards sized 86 acres (229 lbs. per acre) was only of middling quality.

## Crop 1970

From the Southern Hemisphere, where the crop is harvested in February/March each year, the following information has come to hand.

The growth of the hops was retarded by lasting hot and dry weather until the end of February. The bines developed generally a weak overhang and where insufficient irrigation water was available, they could not reach the height of the trellises. Against **Red Spider** on the average once a week one spraying had to be effected.

**REPUBLIC OF  
SOUTH AFRICA**

**Picking** started on February 9th and was finished on March 20th. 33% of the crop were picked by one machine. For the rest great scarcity of pickers prevailed.

**Quality.** The hops of crop 1970 were of good colour, but as a consequence of dry weather, however, lacked weight. The bitter value was below average. The crop was graded as follows: 63% of grade I, 35% of grade II and 2% of grade III. On an acreage of 306 acres, a crop of 135,142 lbs. was harvested (1,091 lbs. per acre). Prices paid to farmers were between 55 and 60 cents per lb. (DM 310.—/337.— per 50 kilos net).

During the growing period 1969/70 the warmest weather on record was registered in this country. From November up to the end of January, day and night temperatures were well above average. On account of dryness hop yards had to be irrigated which was especially favourable for yards on lighter soils. The bines reached the height of the trellises by mid-December and showed a medium overhang. **Bloom** developed already at the beginning of February, somewhat earlier than usual.

**NEW ZEALAND**

**Picking** started in the second half of February and was finished within three weeks under generally nice weather conditions. Almost the whole crop was picked by machines.

The **quality** of the hops was judged not as good as in the year before. The crop was graded as follows: 3.5% of grade I, 44.2% of grade II, 48.4% of grade III and 3.9% of grade IV.

On a somewhat enlarged total acreage of 615 acres, a crop of 1,055,452 lbs. was harvested (1,716 lbs., per acre). For hops of grade I and the variety "Smoothcone" a premium of 2 cents per lb. (DM 8.84 per 50 kilos net) was paid.

**GERMANY.** In all growing districts the warm and sultry weather during the past four weeks in connection with thunder-showers benefited the growth of the plants. The hops reached the height of the trellises with partly overhang, and thus the delay in growth, caused by very cool weather in spring, was equalized. The development of laterals is good and vigorous. The appearance of Downy Mildew and aphids is carefully controlled.

**Growth 1970**

**CZECHOSLOVAKIA.** The delay in growth was mostly equalized by favourable weather. The hops reached the height of the trellises and the health condition of hop yards is satisfying as well.

**YUGOSLAVIA.** Warm and sunny weather in June favoured the delayed growth of the plants remarkably. The hops reached the height of the trellises and a normal further development can be expected.

**FRANCE-ALSACE.** The hops reached the height of the trellises and show a good development of laterals. In the South-Western district of Hagenau, a heavy **hailstorm** on June 19th, 1970, caused great damages in the hop yards. Partly the whole wirework was totally destroyed. The crop loss can not be foreseen yet.

**BELGIUM.** Apart from a few exceptions the stand of the plants is satisfactory. Diseases and pests are carefully controlled.

**U.S.A.** According to reports in hand the stand of the plants in all growing districts is normal and good. Farmers do everything to guarantee a good crop.

The aspects for a good hop crop 1970 are present up till now and it can only be hoped that this expectation will not be disappointed.

July 7th, 1970

**JOH. BARTH & SOHN**