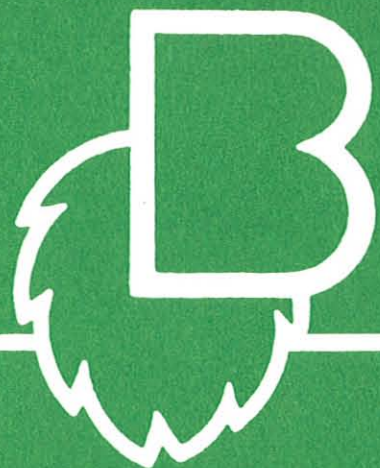


JOH. BARTH & SOHN, NÜRNBERG

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HOPS 1975/76



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Dear reader,

Since the countries in which Anglo-Saxon weights and measures (pounds, acres, gallons, bulk barrels) are used, are reverting more and more to the metric system, or have already made the change, the appropriate figures will in future be given in the corresponding metric form,

kilograms	=	2.20462 lbs.
zentners	=	50 kg (110.23 lbs.)
tons	=	1,000 kg (2,204.62 lbs.)
hectares	=	2.471 acres
hectolitres	=	100 litres (26.42 gall = 0.8523 bbl/USA) (22.01 gall = 0.6114 bbl/Brit.)

as here for the first time in the present report HOPS 1975/76.

JOH. BARTH & SOHN

Hops 1975/76

The political and social unrest which has been smouldering in almost every part of the world for years, still continues unabated and led to open conflict with the ruling system in a number of countries. **Political Situation**

After acquiring independence on 11. 11. 1975, Angola became the scene of a bloody civil war which, by the intervention of foreign powers, ended with victory for the Marxist-oriented forces. All the signs seem now to point to Rhodesia as the next country in which the conflict between white and black Africans will break out.

In the Middle East, the Lebanon slithered into a hopeless mess as domestic differences led to what is virtually a state of civil war between Moslems and Christians — a situation that could not be ended even by the intervention of neighbouring countries.

The world-wide recession which had begun in 1974, reached a low point in the first half of 1975. Since then, although the signs of a recovery in the economy are evident, in particular in the USA, Japan and also in the Federal Republic of Germany, world trade in 1975 diminished for the first time in 25 years, by about 6 %. For 1976, economics experts are expecting an increase in trade again of about the same order of magnitude, which would compensate the loss of the previous year. **Economic Situation**

In order to combat the recession in the economy, considerable budgetary deficits were tolerated in virtually all the industrial countries of the world. In the major countries, the international inflationary trend was successfully decelerated by recessive forces. The increase in, or the continuation of a high level of unemployment remains a major source of concern.

In the **Federal Republic of Germany**, despite a recovery in the state of the economy, the number of those out of work could not be reduced much under 1 million. The Federal Bank again reduced the discount rate, which has now been at 3.5 % since September, 1975. Compared with the previous year, the gross national product for 1975 decreased by 3.6 % and the export surplus dropped to 37.2 thousand million marks (1974: 50.8 thousand million marks). This represents a real decrease of some 10 %. Since the turn of the year 1975, however, a change in the trend can be observed.

1 ha = 2,934 bayr. Tagwerk	1 bayr. Tagwerk = 0,341 ha
1 ha = 2,471 acres	1 acre = 0,405 ha
1 hl = 100 l = 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 metr. ton = 1.000 kg = 20 Ztr. = 2.204,6 lbs.	
1 Ztr. = 50 kg = 110,23 lbs = 1,102 cwt (USA)	1 cwt (USA) = 100 lbs = 45,359 kg
	0,984 cwt (Brit.) 1 cwt (Brit.) = 112 lbs = 50,8 kg
1 cental (Brit.) = 100 lbs = 45,359 kg = 0,9072 Ztr.	
1 kg = 2,20462 lbs	1 lb. = 0,45359 kg
Conversion of thermometer degrees in Fahrenheit and Celsius:	
$86^{\circ} F = \frac{(86-32) \cdot 5}{9} = 30^{\circ} C$	$30^{\circ} C = \frac{30 \cdot 9}{5} + 32 = 86^{\circ} F$

Production of Beer 1975

Country	1000 hectolitres	Country	1000 hectolitres
Germany, Fed. Rep.	93.440	b. f.	16.210
United Kingdom	64.606	Cameroons	1.600
USSR*)	60.000	Angola	1.260
Czechoslovakia	22.373	Zambia	1.200
France	22.316	Rhodesia	875
Germany, Dem. Rep.	20.200	Mozambique	800
Spain	16.618	Ivory Coast	700
Belgium	13.967	Algeria	610
Poland	12.860	Ruanda-Burundi	605
Netherlands	12.434	Tanzania	587
Denmark	8.880	Ghana	510
Jugoslavia	8.477	Tunisia	450
Austria	7.602	Gabun	395
Romania	7.449	Uganda	370
Hungary	6.631	Ethiopia	360
Italy	6.465	PR Congo (Brazzav.)	303
Ireland	6.114	Egypt	286
Sweden	4.791	Morocco	250
Switzerland	4.342	Senegal	228
Bulgaria*)	4.000	Central Afric. Rep.	181
Finland	2.663	Upper Volta	170
Portugal	2.600	Madagascar	162
Norway	1.784	Togo	150
Greece	1.384	PR Benin (Dahomey)	145
Luxembourg	798	Southw. Afr. (Namibia)	140
Malta	110	Tchad	131
Iceland	34	Sudan	125
Europe		Liberia	100
USA	188.420	Niger	58
Canada	21.238	other countries	397
Mexico	19.373	Africa	
Brazil	17.338	Japan	39.290
Colombia	7.721	Philippines	5.000
Venezuela	6.069	South-Korea	1.795
Peru	4.145	China, Peoples Rep.*)	1.750
Argentina	4.123	Turkey	1.540
Cuba	3.300	Vietnam*)	1.500
Ecuador	1.100	Taiwan	1.045
Chile	867	Malaysia a. Singapore	1.008
Uruguay	672	India	710
Bolivia	658	Thailand	584
Puerto Rico	563	Indonesia	550
Jamaica	534	Iran	535
Guatemala	522	Israel	440
Dominican Rep.	500	Hongkong	370
El Salvador	425	Iraq	215
Panama	423	Cyprus	209
Costa Rica	394	Sri Lanka (Ceylon)	140
Nicaragua	350	Lebanon	130
Honduras	314	Jordan	36
Paraguay	280	Syria	35
Trinidad and Tobago	210	Pakistan	32
Martinique and Guadeloupe	85	Asia	
America		Australia	19.340
Zaire	6.270	New Zealand	4.140
South Africa	4.700	Tahiti	93
Nigeria	3.240	Australia/Oceania	
Kenya	2.000	Total	
c. f.	16.210	*) Estimated figure	
			802.407
	412.938		29.358
			56.914
	279.624		23.573

In 1975, as can be seen from the statistics shown here, world beer production reached a level of 802.4 million hectolitres. This represents an increase of 31.5 million hectolitres over our statistics for 1974. In the absence of authentic data, a correction had to be made for the production figures for the USSR and Romania, so that the **actual increase** in production is only some **22 million hectolitres**, with a true increase of 2.8 % for the world.

Crop 1974 (addendum)

The extent of the worldwide overproduction of hops was made clear by the fact that a part of the 1974 crop remained unsold, the quantities involved being estimated as follows:

EEC	Fed. Rep. of Germany	7,000 Ztr. (350 tons)	
	Belgium	4,000 Ztr. (200 tons)	
	France	<u>5,000 Ztr. (250 tons)</u>	16,000 Ztr. (800 tons)
	USA		12,000 Ztr. (600 tons)
	Spain		14,000 Ztr. (700 tons)
	Australia (1973 and 1974 crops)		<u>14,000 Ztr. (700 tons)</u>
			56,000 Ztr. (2,800 tons)

At the beginning of the new season in September, 1975, a large part of the surplus hops in the Common Market was sold to various Eastern Bloc countries at very low prices.

Crop 1975

For the third successive year, the hop producers had to accept a situation in which the sale of non-contractual, so-called "**free hops**", was effected at prices considerably below the cost of production.

Market Survey

The 1975 world crop was some 2 % greater in volume than that of 1974, and yielded some 9 % more alpha acid. As a result, world requirements were again exceeded. An examination of the situation (page 6, "World Production, Beer and Alpha") shows that, since the record harvest of 1973, world supplies of alpha acid have increased by virtually 1/4 of the annual consumption of the brewing industry, which represents an equivalence of some 516,000 Ztr. (25,800 to) of hops. This surplus is, of course, not uniformly distributed among all the breweries of the world, but, rather, is concentrated among the consumers of the industrial countries rich in capital and foreign currency, whose buying behaviour has a considerable influence on the development of the market price.

In consequence of oversupply and the disinclination of a large number of breweries to enlarge still further their already high stocks, the market began very slowly and showed all the signs of a buyer's market. Without the extensive buying on the part of Eastern European countries, the critical situation would have become hopeless. By June, 1976, all the hops of the 1975 crop available in the Common Market had been disposed of.

Increasingly, the trade was requested to transfer contractual obligations of the 1975 crop to later years. As far as this could be done within the possibilities of the unfavourable market situation, the hops released in this way increased the already ample supply.

As a further consequence of the buyer's market, during the period covered by this report, a decline in prices occurred that affected the whole of the contractual structure. Also, the wish for longer contract periods extending to 1980 and beyond at fixed prices was realized. In view of the present prices and the constantly increasing costs of hop growing, long-term commitments of this nature are associated with considerable risks.

Contract Market

On the basis of a normal harvest, the quantities covered by contracts for 1976 are estimated as follows:

Fed. Rep. of Germany	approx. 60–70 % (Hallertau 70–75 %)
France	approx. 35–38 % (Alsace 50 %)
Belgium	approx. 8–10 %
USA	approx. 95 %
Czechoslovakia	approx. 80–90 %
Jugoslavia	approx. 95–98 %

Acreage and Hop Production

Country	1974			1975		
	Acreage hectares	Ø ton per ha	Crop tons = 1.000 kg	Acreage hectares	Ø ton per ha	Crop tons = 1.000 kg
Hallertau	16.775	1,67	28.157,4	16.911	1,61	27.301,0
Spalt	1.125	1,44	1.626,7	1.089	1,51	1.653,5
Hersbruck	363	1,73	629,9	336	1,68	567,7
Jura	481	2,09	1.007,1	491	2,06	1.013,0
Tettnang	1.395	1,48	2.067,5	1.351	1,33	1.785,7
Other Districts	35	1,50	52,6	33	1,21	40,0
Germany, Federal Rep.	20.174	1,66	33.541,2	20.211	1,60	32.360,9**)
Kent	3.476	1,57	5.469,5	3.407	1,17	3.896,7
Hants/Surrey	248	1,42	352,4	227	1,39	297,0
Sussex	517	1,45	747,3	466	1,09	479,5
Herefordshire	1.697	1,56	2.643,8	1.676	1,52	2.584,6
Worcestershire	629	1,57	989,9	632	1,46	911,8
England	6.567	1,55	10.202,9	6.408	1,29	8.169,6
Alsace	735	1,78	1.308,9	728	1,92	1.399,2
Burgundy	67	1,76	118,0	68	1,57	107,3
Flanders	347	1,73	600,4	329	1,94	639,2
Other Districts	13	2,31	30,0	21	2,14	45,0
France	1.162	1,77	2.057,3	1.146	1,91	2.190,7
Alost	329	1,85	610,0	336	1,38	464,6
Poperinge	813	1,94	1.576,8	792	1,70	1.346,2
Vodelée	40	1,60	64,0	40	1,23	49,2
Belgium	1.182	1,90	2.250,8	1.168	1,59	1.860,0
EC-Countries	29.085	1,65	48.052,2	28.933	1,54	44.581,2
Saaz (Zatec)	6.693	0,76	5.094,5	6.860	1,06	7.300,4
Auscha (Ustek)	1.696	0,92	1.551,9	1.700	1,30	2.218,1
Other Districts	962	0,95	912,3	1.099	1,29	1.417,5
Czechoslovakia	9.351	0,81	7.558,7	9.659	1,13	10.936,0
USSR	12.640	0,67	8.500,0*)	11.300	0,96	10.900,0*)
Slovenia	2.546	1,20	3.060,2	2.403	1,18	2.839,9
Backa	1.533	1,51	2.309,0	1.433	1,24	1.786,7
Jugoslavia	4.079	1,32	5.369,2	3.836	1,20	4.626,6
Germany, Democratic Rep.	2.144	1,00	2.284,5	2.197	1,30	2.863,9
Poland	2.539	1,00	2.550,0	2.300	1,19	2.737,0
Bulgaria	1.080	0,50	540,0*)	1.200	0,60	720,0*)
Romania	800	0,68	550,0*)	800	0,68	550,0*)
Hungary	383	0,67	255,0*)	639	0,47	297,6
Galicia	77	0,80	60,7	76	0,99	75,3
León	1.733	1,48	2.557,5	1.731	1,30	2.250,1
Cantábrica	37	1,09	40,5	34	0,83	28,2
Spain	1.847	1,44	2.658,7	1.841	1,28	2.353,6
Other European Countries	636	1,22	776,8	450	1,47	663,3
EUROPE	64.584	1,22	79.095,1	63.155	1,29	81.229,2
Washington	8.667	2,04	17.680,8	8.749	1,95	17.100,8
Oregon	2.256	1,71	3.866,9	2.276	1,90	4.318,2
California	607	1,87	1.136,2	622	1,86	1.156,7
Idaho	1.655	1,91	3.161,6	1.502	1,85	2.785,9
USA	13.185	1,96	25.845,5	13.149	1,93	25.361,6
Canada	362	0,97	351,6	360	1,73	625,0
Argentina	330	0,89	295,0	314	0,65	203,0
Japan	1.422	1,46	2.073,0	1.374	1,59	2.184,0
Victoria	508	1,80	915,0	508	1,79	910,0
Tasmania	703	2,77	1.949,0	663	2,32	1.539,0
Australia	1.211	2,36	2.864,0	1.171	2,09	2.449,0
New Zealand	219	2,12	465,1	212	1,81	383,6
Other Countries	724	0,26	186,3	849	1,17	990,0*)
WORLD	82.037	1,35	111.175,6	80.584	1,41	113.425,4

*) Estimate

**) Official Weight Febr. 24, 1976

Some 42.5 % of the 1975 world hop harvest was processed to other products. Owing to a lack of statistics, we are forced to rely on estimates, and these reveal the following picture:

Hop Extract:	Fed. Rep. of Germany	11.925 to	
	USA	8.550 to	
	Other Countries	<u>5.100 to</u>	25.575 to
Hop Powder:	Fed. Rep. of Germany	12.025 to	
	USA	5.900 to	
	Other Countries	<u>4.750 to</u>	<u>22.675 to</u>
	Total		<u><u>48.250 to</u></u>

Compared with 1974, there was only a slight change in the ratio of extract to powder.

1971: Total processed to extract to powder	approx. 30.750 to hops = 100 % approx. 22.500 to hops = 73 % approx. 8.250 to hops = 27 %
1972: Total processed to extract to powder	approx. 35.700 to hops = 100 % approx. 25.750 to hops = 72 % approx. 9.950 to hops = 28 %
1973: Total processed to extract to powder	approx. 42.900 to hops = 100 % approx. 26.100 to hops = 61 % approx. 16.800 to hops = 39 %
1974: Total processed to extract to powder	approx. 43.115 to hops = 100 % approx. 23.790 to hops = 55 % approx. 19.325 to hops = 45 %
1975: Total processed to extract to powder	approx. 48.250 to hops = 100 % approx. 25.575 to hops = 53 % approx. 22.675 to hops = 47 %

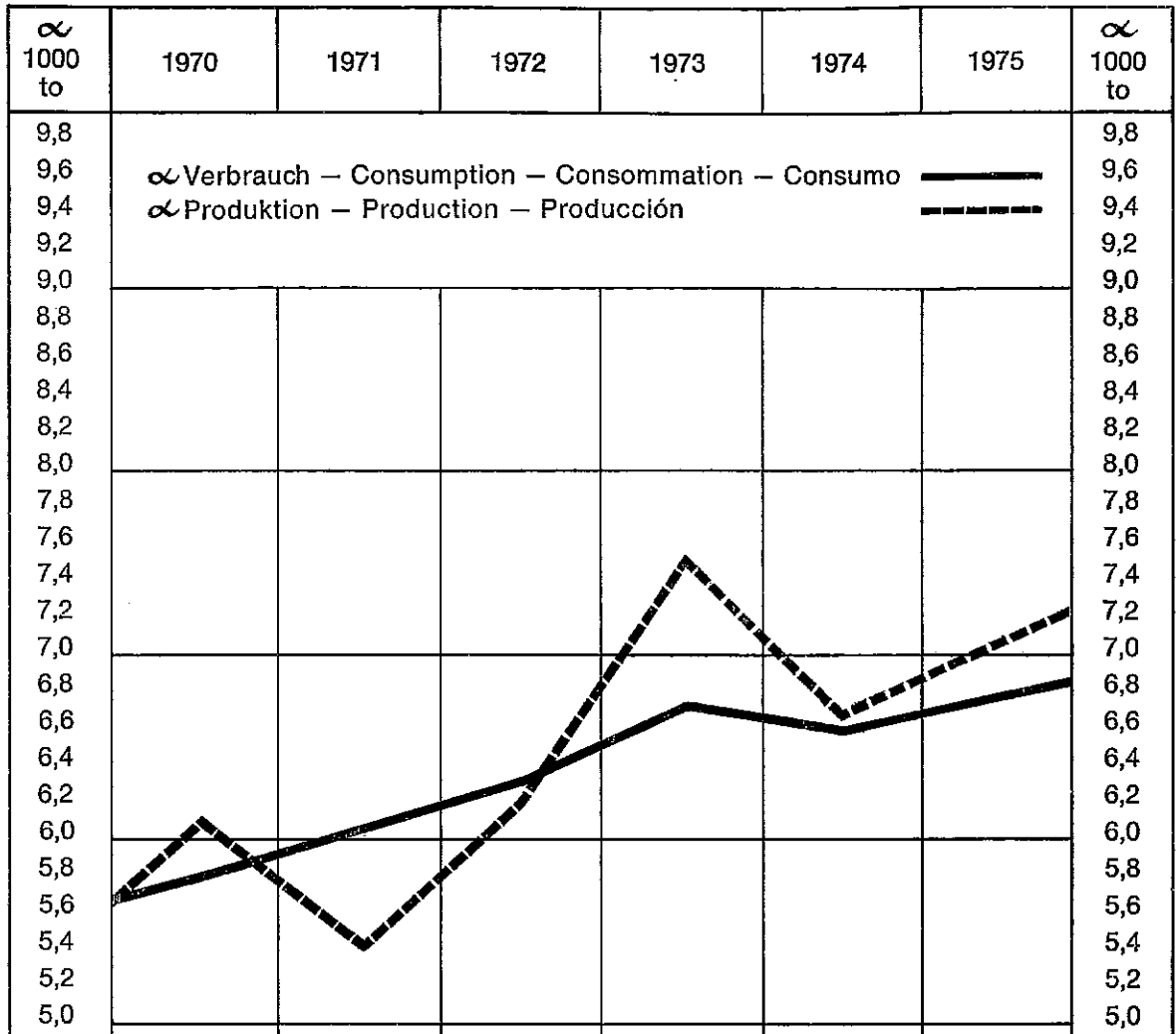
The analytical figures for the hops harvested in 1975 clearly show the influence of the weather on the various varieties. In general, it can be said that aroma hops tolerated the extreme changes in Europe better than the varieties with a high bitter content. The year-to-year fluctuations are in part considerable, thus, for example, Saaz hops proved to have 47.8 % more alpha acid than in 1974.

Bitter Values Crop 1975

Variety	1974			1975		
	Total Resin Content	α	% of total resins	Total Resin Content	α	% of total resins
Hallertau Aroma	13,2	4,75	36,0	14,1	5,35	37,9
Hallertau Northern Brewer	17,0	7,80	45,9	17,9	8,75	48,9
Hallertau Brewers Gold	17,6	8,08	45,9	16,0	7,45	46,6
Spalt	12,7	4,40	34,6	13,4	5,40	40,3
Tettnang	13,0	4,60	35,4	13,4	5,25	39,3
Hersbruck	13,5	5,15	38,1	11,9	4,75	40,0
Saaz	10,6	3,45	32,5	13,2	5,10	38,6
Alsace / Strisselspalt	12,6	4,41	35,0	11,8	4,10	34,7
Jugoslav. Styria (Golding)	14,3	5,95	41,6	12,8	5,73	44,7
Belgian Northern Brewer	17,8	8,35	46,9	15,0	7,45	49,7
Belgian Brewers Gold	15,0	6,25	41,7	13,9	5,75	41,4
Polish Lublin	15,3	4,41	28,8	14,3	4,75	33,2
US-Yakima	17,4	7,03	40,4	17,0	7,05	41,4

The figures in the above table refer to the values per Oct./Nov. 1975, as is, α evaluated conductometrically. Therefore, they cannot be used as a basis for the evaluation of supplies in the later course of the season.

World Production of Beer and Alpha



In the meantime, the following classification of hops has found general acceptance:

- Group A) **Choicest Aroma Hops** (Saaz, Tettnang, Spalt)
- Group B) **Aroma Hops** (Hallertau mittelfrueh, Hersbruck, Hüller Bitterer, Strisselspalt, Saale, Lublin, Golding, Fuggle, Cascade)
- Group C) **Hops with no influence on the World Market** (Eastern Europe, England, Spain, Africa, Asia and other countries)
- Group D) **Bitter Value Hops** (Northern Brewer, Brewers Gold, Bullion, Pride of Ringwood and others)

Hop Group	1974				1975			
	% of World Crop	Crop metr. tons	φ α	α metr. tons	% of World Crop	Crop metr. tons	φ α	α metr. tons
A	10	11.218,30	3,80	425,87	12,5	14.375,2	5,15	740,78
B	26,5	29.371,10	4,92	1.445,06	25	28.218,1	5,34	1.508,88
C	26,5	29.283,50	5,53	1.617,96	27	30.242,1	6,12	1.850,82
D	37	41.302,70	7,61	3.142,20	35,5	40.590,0	7,71	3.131,42
Total	100	111.175,60	5,97	6.631,09	100	113.425,4	6,38	7.231,90

The calculated world average alpha rate of **8.5 gm per hectolitre beer** results in the following balance alpha:

1973: 742.550.000 hl x 8,5 g	= 6.311,7 to Alpha	1974: 770.954.000 hl x 8,5 g	= 6.553,1 to Alpha
Crop	= 7.468,7 to Alpha	Crop	= 6.631,1 to Alpha
Overproduction	= 1.157,0 to Alpha	Overproduction	= 78,0 to Alpha
1975: 802.407.000 hl x 8,5 g	= 6.820,5 to Alpha		
Crop	= 7.232,0 to Alpha		
Overproduction	= 411,5 to Alpha		

No further progress was made in the planned transition of the EC into a political union. Nor was it possible to achieve agreement on the acceptance of Greece, Portugal and Spain into the Community as fully-fledged members.

France, who in July, 1975 had rejoined the European currency union (the "snake"), left it again by the middle of March, 1976. In Italy, on 6. 5. 76, in consequence of the flow of capital out of the country, and the devaluation of the Lira, the cash deposit obligation of 50 % of the value of all imported products and services was re-introduced, this deposit remaining blocked for a period of three months.

The reduction of customs duty that came into effect on 1. 1. 76 introduced the last phase of plans to equalize customs duty between the 6 old and the 3 new member states. The last customs barrier (20 % of the original rates of duty on goods from non-EC countries) will fall on 1. 7. 1977. At the same time, the customs duty applicable to the 6 remaining EFTA countries was lowered accordingly.

Customs Union

On 29. 5. 75, the Commission issued a Regulation (No. 1375/75) permitting the four hop growers in Ireland to form a hop producers group, although existing regulations require at least seven members in such a group.

Hop Market

In **Regulation (EEC) No. 2540/75 issued by the Commission on 6. 10. 1975**, the state of facts is defined which establishes a claim of aid for hop growers. It is the date on which the Council approves such grants for the crop in question by means of a Regulation.

On the basis of the **Regulation (EEC) No. 2610/75 issued by the Council and dated 14. 10. 1975**, the hop growers were granted aid for the 1974 crop as follows (per hectare of the acreage planted in 1973 with the variety named):

100 Acc. Un.: Tett nang, Golding	150 Acc. Un.: Northern Brewer, Brewers Gold
200 Acc. Un.: Spalt	250 Acc. Un.: Bramling Cross
300 Acc. Un.: Hersbruck, Hüller Bitterer	400 Acc. Un.: Hallertau mittelfrüh
500 Acc. Un.: Keyworth's Midseason	600 Acc. Un.: Record, Strisselspalt, Burgundy late, Saaz
650 Acc. Un.: Progress	700 Acc. Un.: Fuggles, Wye Golding Variety

Acc. Un. = Accounting Unit = DM 3,578

From the total subsidy of 27 million DM, some 17.5 million flowed into the Federal Republic of Germany, 15 million of which being allocated to the Hallertau. The major part of the money was used for the stabilizing action on the part of the hop producers group Hallertau (see Page 9).

In the meantime, the Commission in Brussels has also come to see that the hitherto practised method of guaranteeing the income of the hop growers by the widespread application of aids on the basis of acreage has not had favourable results. Production has been left at too high a level, which has not been adapted to consumption on a adequately flexible basis. For this reason, a change in the basic Regulation 1696/71 dated 26. 7. 1971 is envisaged, which will contain the following points:

- subsidies will be paid only to the recognized hop producers groups on a global basis
- the hop producers groups themselves will determine the purposes for which the money will be allocated
- The members of a hop producers group shall be obliged to offer their entire production to the group, to enable the latter "to administer the supply"
- Variety identification for hops and hop products will definitely be introduced in all hop producing countries of the E. C.

In the meantime, the proposals of the Commission have been passed on to the Council of Ministers and are now being considered. At present it is not known when a decision will be taken. Since all those involved in the hop trade (growers, merchants, brewers) have rejected the idea of the exclusive "administration of the supply by hop producers groups", it may be expected that in the Council of Ministers doubts will also be expressed on this point.

In the middle of June, the EC Commission proposed a number of measures to stabilize the hop market in 1976. The implementability of these proposals is presently being studied, so that no decisions may be expected from Brussels before the end of July.

Crop 1976

**FEDERAL REP.
OF GERMANY
Growth 1975**

Once again the winter was mild and brought little snow. A cold spell with a considerable amount of snowfall at the beginning of April was followed by a period of favourable weather for growth. All-in-all, the weather in 1975 was divided up into highly contrasting periods. May/June were too cold and wet, July/August on the other hand, were too hot and dry. In particular the **Northern Brewer** hops tolerated the weather badly, the heat of July resulting in **early flowering** and the arrest of growth. In many cases, the plants had just attained the height of the trellises and remained pointed. The cones fell short of expectations. The Aroma Varieties, on the other hand, tolerated the climatic conditions better.

Shortly before harvesting, in the **Hallertau**, especially in the case of Northern Brewer, a heavy attack of aphids occurred, which could not be controlled and which subsequently spread rapidly. In order to minimize the damage in the gardens involved, picking was initiated before the hops had attained maturity; as a result, these hops had a low alpha content.

In general, however, the 1975 crop had a higher bitter value than that of the previous year – with the exception of **Brewers Gold**, which proved disappointing.

Crop Estimate

Estimation and weighings on 24. 2. 76 revealed the following figures:

	Estimated yield		Weighed yield 24. 2. 1976	
	Ztr.	metr. tons	Ztr.	metr. tons
Hallertau	515.000	25.750	546.020	27.301,—
Jura	19.000	950	20.259	1.012,95
Spalt	34.500	1.725	33.071	1.653,55
Hersbruck	11.500	575	11.355	567,75
Tettngang	37.500	1.875	35.714	1.785,70
other regions	780	39	800	40,—
Total	618.280	30.914	647.219	32.360,95

Purchase from Farmers

Although the expected crop for 1975 was smaller than that of the previous year by some 52,000 Ztr. (2,600 tons), there was a marked bearish mood among the buyers. Since it was expected that bitter value hops would be in short supply, these were much in demand right from the start. As news of the stabilization measures became known beginning of October, 1975, prices paid to farmers were suddenly brought into line with those that the Hallertau producers group would pay for excess hops.

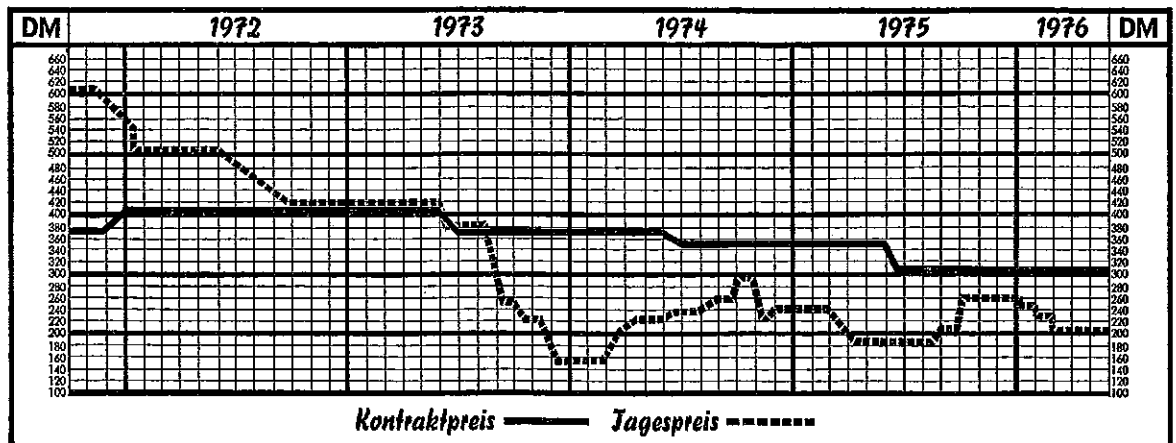
Variety	5. 9.	12. 9.	19. 9.	26. 9.	3. 10.	10. 10.	17. 10.	24. 10.	31. 10.	7. 11.
Hallertau Aroma DM	—	200/230,—	200,—	200,—	260,—	260,—	260,—	260,—	260,—	260,—
Hallert. N. Brewer DM	200,—	200,—	200,—	200/220,—	220,—	250,—	250,—	250/260,—	250,—	250,—
Hallert. Br. Gold DM	200,—	200,—	200,—	200,—	220,—	220,—	220,—	220,—	220,—	220,—
Spalt DM	—	225,—	200,—	200,—	280,—	300,—	300,—	300,—	cleared	—
Tettngang DM	—	250,—	220/230,—	230,—	260/280,—	300,—	300,—	320,—	325,—	cleared
Hersbruck DM	—	—	200,—	200,—	—	230,—	240,—	240,—	240,—	cleared

The above prices are per 50 kg ex producer's premises, plus VAT but excluding packing.

At the beginning of November, 1975, the districts Spalt, Hersbruck and Tettngang were virtually sold out. As a result of the take over of hops in the course of the stabilization action, the Hallertau was also cleared.

Spot Market and Contract Prices

The graph below shows the development of spot market and contract prices for **Hallertau Aroma Hops**.



The contract price of DM 300,— will also apply to the 1976–1978 crops. For the subsequent years an increasing tendency of between DM 30,— and DM 50,— seems to be on the cards.

With respect to the unsold hops of the 1974 crop, the asking prices fell as the new harvest approached — for Hallertau varieties to DM 100,— and below, while good quality Spalt hops still fetched DM 150,—. These prices per 50 kg of packed hops and excluded VAT and packing.

Nurnberg Market

First trading in 1975 hops started on the Nurnberg Market right at the beginning of the new season. In most cases, these hops were released from contracts involving the 1975 crop — which were postponed to later years — or were sold in order to balance surplus or insufficient stocks. The activity on the market then diminished again.

The demand for Northern Brewer was particularly brisk, while Brewers Gold were neglected on account of their low alpha content.

The price level remained largely unchanged until about the end of September/beginning of October, when the stabilization measures began to have an effect on the Nurnberg Market.

Variety		Aug. 75	5. 9.	12. 9.	22. 9.	from 3. 10. to end November
Hallertau Aroma	DM	100,—	250/260,—	235/240,—	240/250,—	280,—
Hallertau Northern Brewer	DM	100,—	230/235,—	245,—	250/255,—	280/285,—
Hallertau Brewers Gold	DM	100,—	225/235,—	235,—	235/240,—	238,—
Spalt	DM	150,—	300,—	275,—	255/265,—	320/330,—
Tettnang	DM	—	310/315,—	310/315,—	270/280,—	340,—
Hersbruck	DM	—	—	—	240,—	260,—

The above prices are for 50 kg packed hops, plus VAT, ex warehouse, but excluding the cost of packing.

It must be mentioned that the above prices were paid for top quality hops, lower quality or aphid-impaired hops fetched correspondingly lower prices, the range being greater than usual.

Trading in foreign hops on the Nurnberg market was insignificant.

At an early date, the German Hop Growers Association had expressed the intention of employing the expected Brussels aid for the 1974 crop for stabilization of the 1975 hop market. A positive decision on the part of the EC Council of Ministers was not taken until 30. 9. 1975.

Market Stabilization

The intervention on the hop market thus made possible was initially limited to the Hallertau and Jura districts and was extended to include Spalt only on 7. 10. 1975. This action was carried out largely by the hop producers group Hallertau. On account of the fact that the remaining districts had few unsold stocks, they were excluded from the action.

In the Hallertau a total of some 20,000–22,000 Ztr. (1,000 to 1,100 tons) were taken off the market, of which some 51 % were aroma hops and 49 % bitter hops. For class I quality to be taken over from the growers, the following prices were agreed:

Aroma hops	DM 260,—
Bitter hops	DM 220,—.

For poorer qualities of grades II to IV, reductions were made depending upon classification — in the case of aroma hops DM 25,— to 100,— and for bitter hops DM 20,— to 60,—. The delivery of these hops was effected, with the support of the trade up until the end of 1975. A stringent yardstick was applied in the question of grading.

As a result of the action an even greater fall in market price for farmers was prevented; this was, however, not the case in the second marketing stage. The stocks sold on this basis had to be disposed of under buying prices. Thus, the members of the Hallertau producers group made a considerable sacrifice also for those growers outside the group.

Acreage

The hop acreage employed as a basis for the estimation of the crop breaks down as follows:

Growing Districts	1970	1975		
	Total Acreage hectares	Existing Acreage hectares	New Plantings hectares	Total Acreage hectares
Hallertau	10.166	15.867	1.044	16.911
Spalt	978	1.064	25	1.089
Jura	311	455	36	491
Hersbruck	341	329	7	336
Tettnang	941	1.347	4	1.351
other regions	42	31	2	33
Germany, Fed. Rep.	12.779	19.093	1.118	20.211

While in the Hallertau and Jura a slight increase of altogether 146 ha as compared with 1974 was reported, a decrease of altogether 108 ha occurred in the remaining districts.

Cultivation of Varieties

The Bavarian Office for Soil Cultivation and Crop Farming, Freising-Munich published the following details on the cultivation of the various varieties in the individual districts:

Districts	Hallertau mittelfrüh ha	Spalt ha	Hersbruck late ha	Tettnang early ha	Hüller Bitterer ha	Northern Brewer ha	Brewers Gold ha	Record ha
Hallertau	4.311	17	2.491	3	1.392	5.970	2.333	394
Spalt	561	481	1	—	12	6	27	2
Jura	270	—	62	1	27	47	82	2
Hersbruck	156	—	144	—	4	25	8	—
Tettnang	283	—	9	1.058	—	—	—	—
other regions	8	—	5	11	3	1	2	1
Total	5.589	498	2.712	1.073	1.438	6.049	2.452	399

The increase in the cultivation of varieties rich in bitter substances continued in 1975, too. In 1974, the ratio aroma hops to bitter value hops was 59:41 %, in 1975 this ratio changed to 56:44 %.

In the **Hallertau**, the acreage given over to the cultivation of bitter value hops exceeded that for aroma hops.

	Aroma hops	Bitter value hops
Acreage 1974:	52 %	48 %
Acreage 1975:	48,6 %	51,4 %

Particularly marked is the continued diminishment of the variety Hallertau mittelfrueh, which in 1975 covered only 81.4 % of the acreage it had covered in 1974. In comparison with the year 1971 (7,274 ha), the reduction in acreage is already 40.7 %.

As a percentage of the total crop, the aroma varieties accounted for only 46.5 % of the Hallertau harvest. If the yield of bitter value hops had been normal, the percentage would have been even considerably smaller.

UNITED KINGDOM

The winter of 1974/1975 was unusually mild and wet with virtually no snow or frost. The summer, on the other hand, was, for England, really hot and sunny. Diseases and pests occurred to the usual extent, but they did only little damage.

Picking began several days earlier than usual and was favoured, in the main, with good weather. In consequence of the long, dry summer, the yield did not come up to expectations so that only 88.7 % of the contracts were met. The supplies of the generally well stocked brewing industry were, however, in no way impaired by this fact.

The hops of the 1975 crop were of excellent **quality** and had a considerably higher alpha content than in the previous year; in some cases, the alpha values equalled those of the record year of 1973.

As a result of England's entry into the EC, a change in the previous market regulations became necessary. The adaptation to the Continental market is effected in stages.

1975: For the first time, the brewing industry was represented in the Board's valuation panel by a hop merchant. The quality classification comprises the grades choicest, I and II. The few lower quality lots were classified at the discretion of the valuation panel.

1976: Three changes will be made in the previous practice:

Firstly, the contracts will contain an index clause, i.e. the price already published can vary according to the rate of inflation. As reference base, the figures of the Board of Trade dated June, 1975 and June, 1976 will be taken.

Secondly, the cost-free storage of hops in the Hops Marketing Board's warehouses until 31. 3. after the harvest, will cease. In future, the buyer will have to pay a storage charge in accordance with a fixed schedule.

Thirdly, the examination of hops by the trade will disappear. Instead, the Hops Marketing Board will provide a warranty against defect.

1977: Beginning with this crop a completely new system will be practised. The Hop Merchants will contract directly with their Brewer Customers and cover their requirements in bulk with the Hops Marketing Board.

In order to enable the trade to make arrangements in good time, each grower will inform the Board by 9. 1. 1976 as to the quantities and varieties of the 1977 crop he will be able to offer. Growers offers are, however, limited to 75 % of their basic quota, which approximates to the UK requirements.

The buyer of English hops has a choice of three possibilities:

1. Every regular buyer has an option to purchase termed "courtesy call", for a certain amount and variety from a named grower. Between 15. 1. 1976 and 26. 2. 1976, he was able to make use of this option by means of "primary indexed contracts". From 1. 4. 1976, other interested parties can also purchase non-contract hops on the same terms with the aid of "secondary indexed contracts".
2. After the opening of the "secondary indexed contracts", a buyer may ask for a certain quantity and variety by means of "fixed price contracts", but this is no longer possible from a named grower. The conclusion of such contracts is possible until the 1977 harvest has been brought in.
3. After the 1977 harvest, spot purchasing can be freely effected at a price ruling at the time.

With the stepwise "relaxation" of the previously rigid marketing system, the English hop market is gradually being adapted to the free market of the other EC countries.

While cultivation of aroma hops continues to decrease, the varieties with a high content of bitter substances have now "conquered" 53 % of the acreage under cultivation.

Cultivation of Varieties

Districts	Golding ha	W. G. V. ha	Fuggles ha	Northern Brewer ha	Bramling Cross ha	Bullion ha	North- down ha	Key- worth ha	Chal- lenger ha	other varieties ha
Kent	305	372	126	53	785	172	144	175	126	810
Hants/Surrey Hampshire	29	—	16	42	—	8	92	—	40	—
Sussex	—	2	54	9	43	36	18	32	29	48
Herefordshire	92	—	562	184	—	136	303	—	274	—
Worcestershire	75	—	96	87	—	76	132	—	92	—
Brewer Growers	45	47	5	61	118	120	50	153	48	86
Total	546	421	859	436	946	548	739	360	609	944

Particularly marked is the drop of the aroma variety Fuggles (395 ha), Golding (162 ha), Wye Golding Variety (161 ha) and Bramling Cross (151 ha). On the other hand, the high bitter content varieties Wye Target with 381 ha, Northdown with 232 ha and Challenger with 203 ha have experienced a particularly large increase. Altogether, however, the English hop acreage in 1975 was less than in 1974 by 159 ha.

The new Agricultural (Miscellaneous Provisions) Bill enables the Minister of Agriculture to designate certain areas in which pollination of female hop flowers is to be prevented. The first region for growing seedless hops is **Hampshire** covering about 200 hectares.

FRANCE

ALSACE. The growth of the hops was, in general, normal. The dry and hot summer, however, had a negative effect. Late infestation with **aphis** caused damage in the gardens.

Picking began at the end of August with the variety Northern Brewer and lasted, in the case of the late hops, thanks to the favourable weather, until the end of September. In **quality**, the crop was slightly inferior to that of the previous year, in particular with respect to the alpha content.

NORTHERN FRANCE. In consequence of the cold and dry spring of 1975 which continued into June, growth was retarded and could not be caught up during the summer. Here, too, a severe attack of **aphis** occurred at the start of the harvest.

During **picking**, good weather prevailed, so that the hops were brought in in a dry state. The bitter content was lower than in 1974.

The **market prices** remained unchanged from the time of harvesting until November,
 FF 350,— for Northern Brewer
 FF 300,— for Brewers Gold.

The percentage of hops under contract continues to be very low and is estimated to be some 13 % for Northern Brewer and about 10 % for Brewers Gold. The ruinous prices for hop growers further discouraged the farmers, so that the grubbing of large areas is expected.

Market Development

As late as April, 1976 it looked as though it would be impossible to dispose of the still unsold French hops of the 1975 crop. By that time, only the stocks of the 1974 crop in Northern France had been sold.

By mid-June, however, an unexpectedly large turnover of hops was registered; in the course of trading, all the 1975 hops were cleared, with the exception of some 1,000 Ztr. (50 tons) in the Departement Nord, the owners of which were not willing to sell at the prices offered.

Varieties

The following table shows the present situation with respect to the varieties under cultivation.

District	Strisselspalt ha	Record ha	Northern Brewer ha	Brewers Gold ha	Burgundy late /Hallertau ha
Alsace	399	81	57	191	—
Flanders	—	—	118	207	4
Burgundy	—	—	9	44	15
Total	399	81	184	442	19

The variety Brewers Gold has now toppled the Strisselspalt hop from its leading position. Here, too, a trend towards the cultivation of more bitter hops can be seen.

BELGIUM

A very mild and wet winter 1974/1975 was followed by a cold spell with snowfalls. In general, the months of June to August were hot and dry. This weather was damaging, in particular, the Northern Brewer hops and led to low yields per hectare and a low alpha content.

Picking of this variety was terminated prematurely and since an interruption of the harvesting was considered undesirable, the late varieties were picked before they had attained full maturity.

In general, the 1975 crop was of good **quality**. Since, however, more than 80 % of the hops cultivated were of the high bitter value varieties, the disappointing alpha content had a negative effect on the marketing.

Market Development

Up until the middle of October/beginning of November, buying from farmers was in part quite brisk. The prices for salable varieties developed as follows (per 50 kg first costs).

		1. 9.	15. 9.	1. 10.	15. 10.	1. 11.
Hallertau	BF	3.000/3.500,—	3.500,—	3.500,—	3.500,—	3.500,—
Northern Brewer	BF	2.500/3.000,—	3.000,—	3.000,—	3.500,—	3.000,—
Brewers Gold	BF	2.000/2.500,—	2.500,—	2.500,—	2.500/3.000,—	2.500,—

From November, buying was very quiet and, despite falling prices, little interest was shown in the still available, unsold hops. In the middle of April, some 4,000 Ztr. (200 tons) still remained unsold. By mid-June, however, these hops had also been sold, although at very low prices (BF 1.000,—/1.500,— per 50 kg).

The percentage of hops from the 1976 crop under contract has fallen to below 10 %.

In comparison with the previous year, there was virtually no change in the varieties grown. The areas listed below include the uncultivated portions of the hop garden (e. g. the area needed by machinery for turning, etc.), which account for some 10 %:

Varieties

District	Northern Brewer ha	Brewers Gold ha	Hallertau ha	Record ha	Saaz ha	Fuggles ha	other varieties ha
Alost-Asse	106	36	96	68	26	—	4
Poperinge	365	352	51	6	—	—	18
Vodelée	9	6	—	—	7	11	7
Total	480	394	147	74	33	11	29

In the spring of 1976, further hop yards were grubbed out, the acreage being indicated with some 60 hectares.

While the spring was cooler and drier than normal, the temperatures between May and August were higher than average. The long, dry spell had a negative effect on the harvest yield of the hop gardens located on poorer soil. The alpha content, however, was considerably above the values for 1974.

IRELAND

The cultivated acreage was reduced from 56 hectares in 1974 to 52 hectares, which broke down into 15 hectares Fuggles, 36.5 hectares Northern Brewer and 0.5 hectares Bullion. The cultivation of Fuggles continues to fall, the intention being, by way of trials, to replace this variety by Wye Northdown.

As contractually agreed, the whole crop of 69.6 tons was bought up by the brewing industry.

The mild and dry winter was followed by a warm, growthpromoting spring. A cold spell in June led to an arrest of growth, but from the second half of July, favourable weather conditions again predominated. As a result, the retarded growth was more than made up for and the harvest turned out to be excellent, both quantitatively and qualitatively.

CZECHO-SLOVAKIA

The Czech hop exports for 1975/1976 accounted for more than 57 % of the 1975 crop; as a result some 1,300 tons of hops had to be imported to cover the requirements of the home consumers.

Only sparse information is available with respect to the cultivation of hops in the USSR. According to the latest publications, some 11,300 hectares were under cultivation in 1975 and yielded a crop of about 218,000 Ztr. (10,900 tons). The reason for the low yield per hectare is to be seen in the extremely dry weather in the hop growing regions of the Ukraine in 1975. It is said that for the 1975 crop, the producer's prices were increased by an average of 20 %.

USSR

SLOVENIA. In consequence of the rainy and cool summer in 1975, in particular in July and August, the harvest suffered a setback. Attacks by pests were difficult to get under control. In addition, an estimated 485 tons of hops were destroyed by hailstones. Quantitatively, the yield fell short of expectations by some 15 %, qualitatively, however, it was adjudged good.

JUGOSLAVIA

The quotas for export and home market were completely taken up by forward contracts, so that no hops of the 1975 crop were available on the free market. Nevertheless, there was no shortage in this provenience since, as a result of the "transfer actions" of the previous year, Styrian hops were made available by the trade in adequate quantities

The traditional aroma variety, Golding, is now grown on 84.6 % (1,966 hectares) of the acreage under cultivation, while the high bitter value variety Super-Styrian, whose alpha content lies by 8–10 %, was grown on an increased acreage of 15.4 % (437 hectares).

BACKA. Due to unfavourable weather — the spring was too cold and the summer too wet — the crop was smaller than expected by almost 30 %. 16 hectares of hop gardens were destroyed by storms; heavy rain in August made it difficult to deal with disease and pests.

Owing to the bad weather, **picking** was delayed. Hops of Class I made up only 51 % of the 1975 crop (in 1974, the figure was 79 %), but the alpha content was generally higher than in the previous year.

Since the hop production was completely sold out in advance, in 1975 for export and home consumption, there were no hops available for sale on the free market. Only the traditional variety Backa is cultivated.

In consequence of the drop in price on the world market and the increasing cost of production, a reduction in the area under cultivation to about 1,100 hectares producing a yield of 1,700 tons (34,000 Ztr.) is expected in 1976.

POLAND

In 1975, the hops were able to grow under normal conditions with the result that the yield per hectare was higher than in the previous year and also the alpha content was up by 8 %. The entire crop was sold, some 25 % being exported.

The concentration of hop growing to only a few areas has apparently been completed and the present position is as follows:

Lublin:	1,850 hectares variety Lublin and 95 hectares variety Pulawy
Oppeln:	290 hectares variety Lublin
Posen:	65 hectares variety Lublin

Nothing further has become known about the formerly planned cultivation of hops with a high bitter content.

GERMAN DEMOCRATIC REPUBLIC

The very mild winter of 1974/1975 was followed by a period of bad weather that lasted until the middle of May. The retardation of growth was made up for from the middle of June, when the weather turned summery. The dry period of the summer months had no adverse effect on the size or quality of the crop. Indeed, the Saaz hops were found to have the highest alpha content ever recorded.

On the basis of existing contracts, the whole of the harvest was taken up and assigned to the breweries. To cover the additional requirement, some 1,640 tons of hops, mainly of bitter varieties, had to be imported; these were, in the greater part, processed into extract. No hops were available for export.

Acreage

In comparison with 1974, the area under cultivation increased only slightly.

District	Acreage ha	Crop to	Yield to/ha
Halle/Magdeburg	1.076	1.350,6	1,25
Erfurt	453	569,9	1,26
Dresden/Leipzig	583	863,4	1,48
Gera/Karl-Marx-Stadt	85	80,0	0,92
Total	2.197	2.863,9	1,30

With a cultivation area of 1,447 hectares (65.9 %), the traditional variety Saaz continues to lead the field from Northern Brewer with an area of 750 hectares (34.1 %). No other varieties are grown.

For 1976 no substantial changes in the area under cultivation are planned.

HUNGARY

A marked fall in temperature in the second half of May caused a retardation of hop growth. Considerable precipitations in June/July resulted in a very high humidity, favouring the development of downy mildew, which was hardly kept under control due to repeated rainfalls.

Hops are cultivated on the Hungarian side of the Backa. Some 70 % of the acreage is given over to aroma hops (Saaz and Hallertau mittelfrueh), the remaining 30 % is divided

among the varieties Northern Brewer and Brewers Gold. With respect to the size of the crop, however, the bitter hops accounted for some 44 % of the total which were processed to extract.

To cover domestic requirements, some 90 tons of hops had to be imported, 40 tons of which in the form of extract.

As in the last two years, hops in Spain had excellent conditions for growing, so that again a large, high quality crop was expected. In August, 1975, however, a storm over the main cultivation area **León**, caused tremendous damage, with the result that the harvest fell short of that of the previous year by some 12 %. Even though the bitter value was slightly below that of 1974, 99.5 % of the hops were classified as Grade I.

The hop production, which for the third consecutive year exceeded home requirements, could not be taken up completely by the considerably overstocked breweries. In order to preserve the brewing value, some 600 to 700 tons of the 1974 crop had already been processed to extract, which largely contributed to this "overstocking". The surpluses of the 1975 crop, for which at present there are no takers, were also processed to extract. In Spain, too, the path to a recovery of the hop market must lead to a drastic reduction of the acreage under cultivation.

SPAIN

For the 1975 crop we have the following breakdown:

Varieties	H-3	H-7	Strisselspalt	Hallertau	other varieties
Crop / to = %	1.600,0 68	657,7 27,9	68,0 2,9	19,3 0,8	8,6 0,4

Cultivation of Varieties

While the high bitter content hop variety H-3 again increased its percentage, all the other varieties continue to decrease, the pronounced aroma hops being most strongly affected.

The combined hop growing acreage for the two cultivation areas **Braga and Bragança**, which are virtually identical in size, was stated to be 200 hectares. Only the variety Brewers Gold is grown and a crop of 391 tons was achieved. The bitter values of the 1975 crop were again excellent and were, on average, 9.5 to 10 % alpha acid, as is. 90 % of the hop harvest were classified Grade I.

PORTUGAL

MÜHLVIERTEL (UPPER AUSTRIA). On the 50 hectares of cultivation area (some 5 hectares of which new plantations), a crop of 71.25 tons was brought in. 97 % was classified as Grade I, the bittering values were higher than in the previous year. Nevertheless, the contractual obligations could not fully be met. Various new hop varieties are still being grown on an experimental basis.

AUSTRIA

Compared with the previous year, the cultivation area was reduced by some 35 % and now breaks down as follows:

GREECE

District	Acreage ha	Crop to	Yield to/ha
Ioannina	42,0	28,0	0,67
Larissa	30,5	8,0	0,26
other districts	7,5	1,5	0,20
Total	80,0	37,5	0,47

The reason for this extremely large decrease is probably to be sought in the unusually low yields of the sole variety grown, Brewers Gold. It is reported that, in cooperation with the Ministry for Agriculture, attempts are to be made with other varieties which are better suited to the Greek climate.

In the largest area **Ioannina** in Northern Greece, downy mildew occurred on a scale never before experienced. Dry, hot conditions contributed to the poor harvest.

85 % of a normal crop continue to be under long-term contract with the domestic brewers.

SWITZERLAND

The hop cultivation area in the Canton of Zurich remained unchanged at 13.2 hectares and comprised 8.8 hectares Tettwang, 4 hectares Hallertau and 0.4 hectares Northern Brewer.

In the period from April to May, 1975, the weather was too cold and non-conducive to plant growth. A warm June enabled the retarded hops to catch up again on their growth and, by the middle of July, it was hot and summery and a massive infestation of the plants with aphids resulted.

The entire crop of 21 tons was classified as Grade I (standard quality) and was taken up by interested breweries at a price of SFR 500,-.

USA Growth 1975

In all four states, in which hops are grown, plant growth occurred under normal conditions until August. In this month, however, storms and heavy rain did considerable damage and destroyed about 350 hectares of hop gardens. Only Idaho remained unaffected by serious damage.

WASHINGTON. The variety Clusters was particularly affected by the bad weather. In the damaged gardens, picking was begun prematurely, but a loss of harvest estimated at about 10 % still occurred. Some 160 hectares were not picked at all, in part owing to the bad weather, but also on account of the unsatisfactory prices.

In **OREGON**, about 50 hectares of hop gardens collapsed under the attacks of the weather, mainly Bullion hops. Despite this, this cultivation area produced higher yields per hectare than in the last three years. The Cascade hops had a particularly high alpha content, up to 7 %, as is.

Market Development

From the 1974 crop, 4,125 bales of hops and some 50 tons of extract, also from the 1974 crop, had to be taken over into the new season. The brewers, some of whom were highly overstocked, had virtually no interest in purchases from the new harvest — on the contrary, there was a strong desire to postpone to later years contracts concluded with respect to the 1975 crop. Even on the traditional export markets there was only a very small demand.

Since 97 % of the crop had been contracted, the percentage of unsold hops was relatively small. Spot market prices of the salable varieties developed as shown below:

Variety		1. 9.	15. 9.	1. 10.	15. 10.	1. 11.
Yakima Clusters	\$	-.60	-.60	-.55	-.55	-.55
English Varieties	\$	-.80	-.80	-.75	-.75	-.75
Cascades	\$	-.95	-.95	-.80	-.70	-.60

After, at the beginning of October, 1975, some 2,500 bales of hops had been taken into the Reserve Pool, by the end of November, 1975 the cultivation areas could be considered to have been largely cleared. In order to preserve brewing quality, some growers had their unsold hops processed into extract or pellets.

At a meeting of the Hop Administrative Committee held in January, 1976, it was decided to "freeze" the hops in the Reserve Pool (some 4,500 bales of the 1974 and 1975 crops) in order, in this way, to promote the clearance of brewer's stocks. At the end of March, 1976, however, this decision was rescinded. At the high prices of 73 and 76 cents per lb respectively, no buyers were forthcoming. By the end of May, 1976, the stocks of the 1974 and 1975 crops in the hands of growers were sold off at 30 and 50 cents per lb respectively.

Contract Market

For the 1976 crop, the Hop Administrative Committee recommended releasing only 98 % of the basic quota, provided that the producers groups in the EC put into effect immediate measures to limit the European hop production. Since this was not done, the sales quota was raised to 100 % in March, 1976. At the same time, it was proposed that this 100 % quota should not be exceeded before the end of the seventies, as long as the EC continued its efforts to tailor the hop production in Europe to the absorbing capacity of the market by reducing the acreage under cultivation.

In order to support the wish of the American brewing industry to cut down the imports of European hops, the Hop Administrative Committee voted in March 1975 to extend the special Fuggle allotment of 1 million lbs (453.000 kg) until 1978.

Although with the exception of a small percentage the entire hop production in the USA is covered by contract for years in advance (1976 = 95 %, 1977/78 = 90–95 %), the farmers are, in general, refusing to conclude contracts for the following years, i. e. from 1979, unless previous crops are also included. The present prices can be seen from the table below (per lb, first cost excluding premium).

Variety		1976	1977	1978	1979	1980
Yakima Clusters	\$	-.45	-.65/-.70	-.75	-.83	-.84
Yakima Cascades	\$	-.40	-.65/-.70	-.75	-.83	-.84
Bullions	\$	-.60/-.65	-.95	-.95	-.95	-.95
Fuggles	\$	—	—	1.22	1.27	—
Oregon Cascades	\$	—	—	1.05	1.05	1.05

The crops 1976/77 are, in part, completely sold out; thus, for example, the varieties Fuggles and Oregon Cascades.

The following table gives a breakdown of varieties grown in 1975:

Cultivation of Varieties

Variety	Washington ha	Oregon ha	Idaho ha	California ha	Total ha
Clusters	7.330	28	685	621	8.664
Fuggles	—	1.021	—	—	1.021
Cascade	1.098	343	307	—	1.748
Bullion	—	517	—	—	517
Brewers Gold	—	251	—	—	251
Talisman	—	53	434	—	487
Comet	168	1	1	1	171
others	153	62	75	—	290
Total	8.749	2.276	1.502	622	13.149

While the cultivation of Clusters fell by 6 %, the area given over to **Cascades** increased by 37 %. It turned out, however, that this variety did not completely live up to the expectations placed in it. As loss of aroma and brewing value set in rather early and fast, Cascades seem to be unsuitable for extended storage. The considerable acreage reduction of **Talisman** also indicates that former expectations have been disappointed.

In the meantime, further varieties of hops have been released by the Agricultural Research Station, Corvallis (Oregon), for cultivation:

Willamette: This breed (registered under the No. 21041), which is derived from about two thirds Fuggles, is medium-late and virtually seedless. A particular feature is its very good aroma. While the new variety adapted very well to the conditions in the Willamette Valley in Oregon, this was not so in California and Yakima.

Columbia: This new breed (registered under the No. 21040) is also an aroma variety with a female part of two thirds Fuggles. It, too, matures medium-late and is virtually seedless. With respect to aroma, it is very similar to Fuggles, but it produces a higher alpha content. The best results were also obtained in the Willamette Valley in Oregon.

In addition, the variety **Comet** is to be mentioned, which belongs to the late-maturing varieties (alpha between 8 and 11 %). The best results are obtained in Yakima.

The winter of 1974/75 was unusually wet, but not very cold. In the following months of April to June, a lengthy dry spell prevailed so that the irrigation facilities had to be taken into operation. Warm weather set in just in time in July and promoted the growth of the hops.

CANADA

There were no problems with diseases or pests, and since the weather remained excellent during picking, a very good crop was obtained for all the varieties cultivated. The yields per hectare were almost twice those obtained in 1974.

The 1975 crop was sold on the domestic market without any difficulty. The remaining import requirements were satisfied mainly in the USA.

As can be seen below, the cultivation area and varieties practically have not changed as compared with the previous year.

Fuggles ha	Bramling Cross ha	Kent Golding ha	Brewers Gold ha	other varieties ha
58	187	69	38	8

For the next three years, too, the hop production continues to be covered by contracts, so that any changes in the cultivation area or varieties will be only small.

ARGENTINA

In all regions, the growth of the hop plant was completely normal and, since diseases and pests were also successfully dealt with, a good harvest of some 300 tons was expected.

Picking, which had begun at the end of February, 1975, was interrupted at the beginning of March by heavy **rainfalls** which resulted in flooding of parts of the Rio Negro valley. The cultivation area located in the upper reaches of the river was also affected. As can be seen in the following table, the yields per hectare were considerably lower than the average normally achieved, with the exception of Chubut (El Bolsón).

Growing District	Acreage ha	Crop to	Yield to/ha
Rio Negro	238	155	0,65
Chubut	40	28	0,70
Neuquén	36	20	0,56
Total	314	203	0,65

The effects of the weather were also to be seen in the quality grading. The percentage of hops placed in the grade I category was only 30 %; the average alpha content attained only 4.1 %.

The entire crop was taken up by the domestic breweries.

COLOMBIA

According to information received, by way of experiment, hops were planted in this country, too. The gardens, 1,250 meters above sea level, and covering an area of 13 hectares, yielded two crops in the course of the year, one in May, the other in November. During the maturation period, the hours of daylight were extended with the aid of artificial light. The alpha content of the harvested hops was stated to be 6 to 7 %. The question as to whether commercially viable hop cultivation can develop from these beginnings, cannot yet be answered.

JAPAN

As a result of the very hot summer from mid-July to mid-September, a very large crop of good quality was brought in, 90 % of the hops being of first grade.

The cultivation was distributed among the various regions as shown below:

Growing area	Acreage ha	Crop to	Yield to/ha
Hokkaido	20	22,3	1,12
Iwate	304	437,5	1,44
Yamagata	528	971,5	1,84
Fukushima	230	317,0	1,38
Yamanashi	16	19,8	1,24
Nagano	151	236,5	1,57
others	125	179,7	1,44
Total	1.374	2.184,3	1,59

The early aroma variety Shinshu-Wase again dominated, accounting for 98 % of the acreage under cultivation. Although the prices paid to the hop growers rose by almost 14 %, the Japanese hop growing acreage dropped by 48 hectares compared with 1974.

TURKEY

The 1975 harvest of 120 tons was about 1/3 smaller than expected. The alpha content fluctuated between 4.7 and 8.2 %. The entire crop was sold, but in order to cover the home demand, considerable quantities of hops had to be imported.

The domestic brewing industry is supplied largely with hops from Czechoslovakia and Korea. In an attempt to break this complete dependence on imports, hops were grown experimentally in **Cashmir** and **Himachal Pradesh**.

On an area estimated to total in excess of 8 hectares, Late Clusters, Burgundy late, Talisman, Golden Cluster and a variety called Hybrid-2, originating from South Africa, were grown. With the aid of this wide spectrum of varieties, it is hoped to find out the most suitable variety for largescale cultivation. At the present state of development, all work is carried out by hand. There is also a lack of kilns and other technical facilities.

While the cultivation area remained unchanged in **VICTORIA**, first consequences of the overproduction of hops were to be noted in **TASMANIA**. Principally in South Tasmania hop gardens were grubbed out. As a result, the 1975 crop was smaller than in the previous year by some 15%. But also the average alpha content of the crop did not quite come up to the values of 1974.

AUSTRALIA

Despite very favourable prices, the surplus hops of the 1975 crop could not be sold completely on the world market. Together with the remainders from the 1974 crop, the unsold stock was estimated at about 700 tons. The time difference of the harvest as compared with the Northern Hemisphere, and the great distance to the important consumer centres of the world are impediments for the sale of Australian hops.

Crop 1976

From the Southern Hemisphere, where the hops are harvested in February/March, the following items of news are of interest:

The Argentinian hop harvest in 1976 will probably be of the same quantity as in the previous year, i. e. some 200 tons. With respect to the alpha content, however, the crop is said to be lower.

ARGENTINA

It is reported that experiments with other varieties of hops are to be carried out in an attempt to obtain better results. Varieties mentioned are Pride of Ringwood and Cascade.

TASMANIA. While, in the North, almost ideal weather predominated, that in South Tasmania was changeable. A summer that was too dry, and the diminished acreage resulted in a 30% reduction in the crop.

AUSTRALIA

VICTORIA. The retardation of growth that occurred during the wet spring could not be compensated in the later part of the growing period.

The poor earnings of the last years forced many of the small hop farmers to give up hop growing, in particular in South Tasmania, where the area under cultivation dropped considerably. The comparative figures available reveal the following picture for the 1975 and 1976 crops:

Growing area	1975		1976	
	Acreage ha	Crop to	Acreage ha	Crop (Estimate) to
Tasmania	663	1.539	486	1.000
Victoria	508	910	487	750
Total	1.171	2.449	973	1.750

Information available to date indicates that the alpha content of the 1976 crop has attained good average values.

The unfavourable market for Australian hops has given rise to efforts to improve the situation. Consideration is being given to a centralization of sales and the introduction of a quota system with contracts for future crops.

NEW ZEALAND

A dry period in November/December, 1975, together with the coldest February in years, delayed the growth and maturation of the hops. As a result, picking began 10 to 14 days later than usual, a fact, however, which benefited the **quality** of the 1976 crop.

For the first time, a producer quota was assigned to each hop grower in an attempt to match the supply to the capacity of the market. Hops in excess of the quotas were not picked. These latter were seeded varieties only. In consequence of this measure, only 315.5 tons of hops of the 1976 crop were harvested, almost the whole of which was covered by contracts.

The cultivation area of 191 hectares breaks down into

- 56.5 hectares of the varieties Californian and Calicross
- 4.0 hectares First Choice
- 44.5 hectares Smoothcone and
- 86.0 hectares of seedless hops.

The percentage of seedless hops is already 45 % of all plants under cultivation. The aim is to gradually grow only seedless varieties. A triploid, seedless high bitter content variety presently being cultivated experimentally, is said to produce already the 5th year a mean alpha content of 14 %.

Growth 1976

In the whole of **Central Europe**, the dry spell is already lasting for many weeks, and from the middle of June has been accompanied by an unusual heat wave. Thanks to its deep roots, however, the hop plant has been able to obtain its water supply, so that development is proceeding normally. Merely the variety **Northern Brewer** is rather sensitive to the weather; there is a danger of early flowering and the resulting standstill of growth. Plentiful rain is urgently needed in all countries.

USA. In **YAKIMA**, growth was normal until June, when the weather became too cool — although higher temperatures are again expected in July. In **IDAHO** the hop gardens are in an average, and in **OREGON** in an excellent state.

The hop acreage shows a marked reduction compared with 1975, as can be seen below:

	Washington	Oregon	Idaho	California	Total
1975	8.749 ha	2.276 ha	1.502 ha	622 ha	13.149 ha
1976	8.559 ha	2.200 ha	1.206 ha	611 ha	12.576 ha
Difference	190 ha	76 ha	296 ha	11 ha	573 ha

Available reports indicate that disappointed hop growers have already grubbed out considerable acreages in 1976; the following figures are quoted:

Federal Republic of Germany — Hallertau	200—400 ha
Federal Republic of Germany — other regions	190 ha
England	180—200 ha
France	150 ha
Belgium	60 ha
Jugoslavia	50— 80 ha
USA	570 ha
Australia	200 ha

Thus, in 1976, the world-wide cultivation acreage has been reduced by a further 2,000 hectares approximately (in 1975, the figure was 1,500 hectares).

The publication of our Hop Report involves obtaining material from sources throughout the world. We wish to express our gratitude to all who have assisted us.

Five Years of Hop Policy from Brussels

Free market economy always remains superior

“The shortcomings of the present marketing structure have led to disturbances in the equilibrium of the market” – this is literally quoted in the proposal for changing the basic Regulation of the Hop market No. 1696/71, which the Commission intends to submit the Council of Ministers.

This statement is, quite simply, wrong. On the contrary, the efficient marketing structure is the only intact part of the hop market which, at the present time, is in a crisis. With such remarks, the Hops Department of the Commission is simply trying to make its pet idea of an “administration of the supply by producer groups” more attractive, although in the Hops Advisory Committee, all the representatives of the hop economy have unanimously recommended that experiments of this nature should not be undertaken.

The influence of the Commission in Brussels on the hop market has increased with the volume of its financial subsidies. Since 1971, the following sums have been spent on supplementing incomes:

Country	Income supplements for hop growers							
	Crop 1971 1.000		Crop 1972 1.000		Crop 1973 1.000		Crop 1974 1.000	
	Acc. Un.	DM	Acc. Un.	DM	Acc. Un.	DM	Acc. Un.	DM
Fed. Rep. of Germany	3.826	14.003	3.702	13.549	3.829	14.014	4.875	17.443
France	431	1.577	538	1.969	375	1.373	416	1.488
Belgium	269	985	207	758	206	754	256	916
United Kingdom	—	—	—	—	2.090	7.649	2.008	7.185
Ireland	—	—	—	—	19	70	24	86
Total	4.526	16.565	4.447	16.276	6.519	23.860	7.579	27.118

1971–1973: Acc. Un. = DM 3,66;

1974: Acc. Un. = DM 3,578

If we also include the so-called structural aids paid for variety changes, an amount probably in excess of 100 million Deutschmarks has been pumped into the European hop production during the last five years.

Although, at first sight, this fact may seem highly favourable for the hop producers, it has not proved good for the market, nor in the last resort, for the hop growers themselves. The “self-healing” forces of the market, which is suffering from overproduction, have simply been made ineffectual. Mountainous stocks in the brewing industry, and crops that have been difficult to sell have reduced the role of the hop grower to that of a supplicant in Brussels – and that year for year. The sluggishness of the Brussels machinery prevents it from reacting quickly and flexibly to the situation of the hop market. Months, sometimes years, pass before decisions are made. A solution to the problem of hop overproduction via the mechanism of prices would initially have been a hard, but certainly a quicker one. The free market economy always remains superior.

It would, however, be unrealistic to imagine that influence from Brussels will disappear in the near future. The task of the hop economy is, rather, to prevent the responsible departments becoming more deeply entangled in problems by resorting to “artificial” measures. If harvests remain normal, the production of hops will continue to outstrip consumption. If the Commission is still prepared to make funds available, it is high time that they be used for structural improvements, i. e. exclusively as premiums for clearing cultivation land in order to tailor the hop acreage to the actual requirements.