

*The  
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Analysis of  
Beer and Wine  
Coolers for Alcohol  
1988-1990

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the Excise Tax Division of the  
Connecticut Department of Revenue Services

## SUMMARY

The alcohol content of 149 beers, 69 wine and beer coolers, and 5 wine products was tested. Samples represented analyses made from January 1988 through December 1990. The average alcohol content of regular and light beers was 5.8% and 4.1%, respectively. Wine coolers averaged 4.8%. Results are an update of previous Station Bulletins on these products.

# Analysis of Beer and Wine Coolers for Alcohol 1988-1990

BY LESTER HANKIN AND VIPIN K. AGARWAL

In 1986 we reported in Bulletin 840 from this Station the alcohol content of wine coolers (Hankin, 1986), and in 1988, in Bulletin 865, the alcohol content of beers (Hankin, 1988). We have continued to analyze both beer and wine coolers for their alcohol content, since alcohol is one of the parameters used to calculate the tax levied by the State. This report is an update of Bulletins 840 and 865 and lists products tested from January 1, 1988 through December 31, 1990.

## METHODS

Analysis for alcohol was by AOAC methods (Official Methods, 1990) using gas chromatography as previously reported (Hankin, 1986). Results are reported as percent by volume.

## RESULTS AND DISCUSSION

The alcohol content of the 149 beers analyzed is shown in Table 1. These included three non-alcoholic beers, 15 labeled as "light", and 131 regular beers. The three labeled as non-alcoholic averaged 0.4% alcohol. The 15 labeled as "light" averaged 4.1% alcohol and ranged from 2.5 to 6.1%. The regular beers averaged 5.8% and ranged from 4.2 to 11.9%.

The 149 beers tested were from 26 countries. Sixty brands were from the United States and 69 brands were from Europe. The remaining 20 brands originated in Asia, Australia, South America, Africa, the Middle East, Canada, and Mexico.

Table 2 shows that the alcohol content of the 69 wine and beer coolers averaged 4.8%. Twenty-six of the 30 coolers that claimed an alcohol content were above the amount claimed. These averaged 14.6% over claim. Four brands averaged 9% less than the claimed amount.

Although several of the wine coolers tested carried the same brand name, each cooler represented a different batch. The differences in alcohol content among batches may be a result of change in processing or a change in formulation.

Five samples categorized as wine products (Table 3) contained an average of 5.8% alcohol, which was about 12% above the claimed amount.

## REFERENCES

- Hankin, L. 1986. Analysis of wine and beer coolers. Bulletin 840, The Connecticut Agricultural Experiment Station, New Haven.
- Hankin, L. 1988. Analysis of beer. Bulletin 865, The Connecticut Agricultural Experiment Station, New Haven.
- Official Methods of Analysis. 1990. 15th edition, K. Helrich (ed.). Assoc. Official Analytical Chemists, Arlington, VA.

Table 1. Alcohol content of beer.

Country	Brand	Alcohol %
Australia	Foster's Light Lager	2.8
Australia	K.B. Lager	5.1
Australia	Sheaf Stout	6.0
Belgium	Artvelde Grand Cru Belgian Ale	7.3
Belgium	Blanche des Nieges Belgian Ale	5.3
Belgium	Brigand Belgian Ale	10.4
Belgium	Chimay Peres Trappistes Ale	7.6
Belgium	Chimay Peres Trappistes Beer	10.1
Belgium	Duvel Belgian Beer	8.5
Belgium	Duvel Belgian Beer	9.6
Belgium	Framboise Lambic Raspberry Flavored Ale	3.9
Belgium	Gueuze Lambic St. Louis Belgian Beer	5.4
Belgium	Kasteel Biere du Chateau Belgian Ale	11.9
Belgium	Maredsous Black Abbey Belgian Ale	10.1
Belgium	Maredsous Green Abbey Belgian Ale	7.9
Belgium	Mateen Belgium Triple Ale	9.5
Belgium	Orval Trappist Ale	7.4
Belgium	Pesche Lambic Ale with Peaches Added	2.7
Belgium	St. Sixtus Belgian Abbey Ale	8.1
Canada	Molson Dry Beer	5.0
China	Canton Lager Beer	5.7
China	ChangLee Beer	5.1
Czechoslovakia	Gambrinus Lager Beer	4.9
Denmark	Giraf Malt Liquor	7.6
England	ESB Ale Extra Special Bitter Export Ale	6.2
England	London Pride Traditional English Beer	4.6
England	Old Peculiar Theakston Ale	5.7
England	Samuel Smith Oatmeal Stout	5.4
England	Samuel Smith Taddy Porter	5.5
England	Samuel Smith's Imperial Stout	7.8
England	Samuel Smith's Lager	5.6
England	Samuel Smith's Nut Brown Ale	5.7
England	Young's Oatmeal London Porter	5.9
England	Young's Oatmeal Stout	5.7
France	3 Monts Flanders Golden Ale	7.7
France	3615 Pescheur La Biere Amoureuse	5.0
France	Jenlain French Country Ale	6.2
France	Jenlain French Country Ale	7.6
Germany	Augustinbrau Munchen Maximator Dark Beer	7.2
Germany	Augustinbrau Munchen Munich Light Export Beer	6.1
Germany	Ayinger Altbairisch Dunkel Old Bavarian Dark Beer	6.2
Germany	Ayinger Brau-Weisse Beer	5.8
Germany	Ayinger Maibock May Bock Beer	8.1
Germany	Bitburger Beer	4.8
Germany	Celebrator Bavarian Double Bock Beer	7.6
Germany	Extracto de Malta Hamburg Malt Beverage	4.3
Germany	Haake Beck Non-alcoholic Beer	0.3
Germany	Kropf Dark German Draft Beer	4.9
Germany	Kropf Genuine German Draft Beer	5.0
Germany	Oberdorfer Weissbier	5.6

Table 1. Alcohol content of beer (continued).

Country	Brand	Alcohol %
Germany	Oberdorfer Weissbier	5.7
Germany	Puntigamer Dark Malt Beer	5.0
Germany	Puntigamer Panther Beer	5.3
Germany	Reschs Pilsener Beer	4.6
Germany	Schuter's Red Star Select Beer	4.2
Germany	Schuter's Red Star Select beer	4.3
Germany	Weizenthaler Malt Beverage	0.6
Germany	Wurtzberger Hofbrau Bavarian Dark Beer	5.7
Germany	Wurtzberger Hofbrau Holiday Beer	8.2
Germany	Wurtzberger Hofbrau Oktoberfest Beer	5.6
Germany	Wurtzberger Hofbrau Pure Bavarian Beer	5.3
Germany	Wurtzburger Hofbrau Hefe Weissbier	6.3
Greece	Spartan Lager Export Beer	5.1
Holland	Alfa Holland Beer	4.7
Holland	Bavaria Lager Beer	5.1
Holland	Grolsch Premium Dry Draft Beer	6.0
Hong Kong	Sunlik Beer	5.3
India	Golden Eagle Lager Beer	4.5
India	Taj Mahal Lager Beer	5.0
Israel	Maccabee Beer	5.3
Italy	Dreher Birra Italiana Beer	5.8
Ivory Coast	Mamba Malt Liquor	6.2
Japan	Asahi Super Dry Draft Beer	5.1
Kenya	Tusker Malt Lager	5.2
Liberia	Monrovia Club Beer	5.6
Mexico	Corona Extra Beer	4.8
Mexico	Corona Light Beer	5.4
Mexico	Simpatico Beer	4.3
Philippines	San Miguel Dark Beer	5.3
Philippines	San Miguel Pale Pilsen Beer	5.2
Scotland	Bellhaven Scottish Premium Lager	5.5
Scotland	MacAndrews Scotch Ale	8.5
Scotland	McEwan's Export Ale	5.3
Sweden	Pripps Imported Lager Beer	5.8
Switzerland	Hopfenperle Swiss Beer	5.1
Switzerland	Warteck Lager Beer	4.8
Switzerland	Warteck Light Beer	2.5
USA	Augsburger Bock Beer	5.9
USA	Augsburger Dark Beer	6.1
USA	Augsburger Golden Beer	6.1
USA	Augsburger Light Beer	4.4
USA	Blackwell Stout	4.7
USA	Brooklyn Brown Dark Ale	5.9
USA	Bullshooters Original	5.1
USA	Cardinal Amber Light Beer	3.3
USA	Catamount Amber Ale	5.6
USA	Catamount Gold Ale	4.9
USA	Catamount Porter Ale	5.8
USA	Dock Street Amber Beer	5.4
USA	Elm City Beer	6.6

Table 1. Alcohol content of beer (continued).

Country	Brand	Alcohol %
USA	Elm City Golden Ale	4.2
USA	Flagship Lager	4.7
USA	Genesee 12 Horse Ale	4.8
USA	Glacier Bay Beer	5.3
USA	Golden Export Beer	4.9
USA	Hamm's Big Bear Malt Liquor	6.8
USA	Harpoon Ale	4.5
USA	Harpoon Golden Lager	4.7
USA	Harpoon Winter Warmer Beer	5.2
USA	Hope Bock Beer	6.7
USA	Hope Christmas Ale	6.5
USA	Hope Lager Beer	5.7
USA	Hope Oktoberfest Beer	5.4
USA	Hope Red Ale	6.5
USA	Jacob Best Premium Light Beer	4.8
USA	Koch's Golden Anniversary Beer	4.6
USA	Koch's Golden Anniversary Light Beer	4.3
USA	Lowenbrau Light Beer	4.6
USA	Manhattan Gold Lager Beer	5.3
USA	Manhattan Sport Light Beer	3.4
USA	Miller Reserve Beer	4.8
USA	Miller Reserve Light Beer	4.5
USA	Milwaukee 1990 Harley Davidson Heavy Beer	5.3
USA	Montauk Light Beer	4.2
USA	Nathan Hale Lager Beer	4.6
USA	New Amsterdam New York Ale	5.0
USA	New England Atlantic Amber	6.1
USA	New England Gold Stock Ale	5.5
USA	New England Holiday Ale	6.8
USA	New England Oatmeal Stout	4.2
USA	O'Doul's Non-alcoholic Brew	0.3
USA	Old German Beer	5.6
USA	Port Royal Export Pilsner Style Beer	5.2
USA	Rattlesnake Beer	4.2
USA	Red Bull Malt Liquor	6.7
USA	Samuel Adams Octoberfest Beer	5.9
USA	Samuel Adams Winter Lager	5.3
USA	Saranac 1880 Beer	4.9
USA	Schlitz Light Beer	4.5
USA	Schutters Beer	5.2
USA	Schutters Special Beer	5.9
USA	Smith & Reilly Honest Beer	5.2
USA	Stallion Ten Extra Malt Liquor	7.7
USA	Telluride Beer	5.0
USA	Zelev Dry Beer	5.4
USA	Zelev Dry Light Beer	3.4
USA	Zelev Lemon Dry Light Beer	3.1
Venezuela	Andes Cerevza Beer	4.9
Yugoslavia	Gold Horn Club Imported Beer	5.3

Table 2. Alcohol content of wine and beer coolers

Brand	Alcohol %	
	claim	found
Bartles & Jaymes Peach Flavored	5.0	4.5
Bartles & Jaymes Premium Black Cherry Flavored		5.0
Bartles & Jaymes Premium Blush		6.0
Bartles & Jaymes Premium Light		2.2
Bartles & Jaymes Premium Light Berry Flavored Wine Cooler	1.5	1.6
Bartles & Jaymes Premium Red Sangria Flavored		5.6
Bartles & Jaymes Premium Tropical Flavored		4.8
California Cooler Passion Malt Beverage	3.2	4.4
California Cooler Citrus	4.0	4.2
California Cooler Citrus	4.0	4.8
California Cooler Citrus		5.2
California Cooler Cranberry Mist		4.1
California Cooler Cranberry Mist	4.0	4.2
California Cooler Cranberry Mist		5.3
California Cooler Cranberry Mist		5.3
California Cooler Orange Splash		4.0
California Cooler Orange Splash	4.0	4.3
California Cooler Orange Splash	5.0	5.7
California Cooler Peach		4.0
California Cooler Peach	5.0	6.2
California Cooler Peach	4.0	4.3
California Cooler Premium Citrus	5.0	5.3
California Cooler Premium Orange Splash	5.0	4.5
California Cooler Premium Peach	5.0	4.6
California Cooler Premium Spiced Apple	4.9	5.0
California Cooler Premium Tropical Berries	5.0	4.6
California Cooler Tropical Berries	4.0	4.5
California Cooler Tropical Berries	5.0	6.0
California Cooler Wild Cherry Splash		4.2
California Cooler Wild Cherry Splash	4.0	4.5
California Cooler Wild Cherry Splash	5.0	5.4
Calvin Cooler Extra Dry Malt Beverage		4.4
Calvin Cooler Orange Malt Beverage		5.0
Calvin Cooler Peach Malt Beverage	3.2	4.4
Calvin Cooler Pina Coconut Malt Beverage	3.2	4.1
Calvin Cooler Raspberry	3.2	4.2
Champale Blush Royal Malt Liquor		5.6
Champale Orange Mist Malt Liquor		5.4
Everclear Purple Passion		5.7
Franzia Chardonney Real		4.9
Franzia Chenin Blanc Real Wine		5.0
Franzia White Grenach		5.2
Fratelli Cella Natural Peach	6.0	6.6
Fratelli Cella Natural Raspberry	6.0	6.5
Harley Davidson White	6.0	6.4
Matilda Bay Special Dry Wine		4.6
Seagram's Black Cherry Flavored		4.1
Seagram's Black Cherry Flavored		4.2
Seagram's Extra Wine	4.0	4.9
Seagram's Lime Mist	4.0	4.5

Table 2. Alcohol content of wine and beer coolers (continued).

Brand	Alcohol %	
	claim	found
Seagram's Natural Black Cherry		4.4
Stroh's White Mountain		4.4
Sun Country Cherry Passion		4.9
Sun Country Clear & Dry Classic		4.9
Sun Country Jamaican Rum	5.0	5.7
Sun Country Melon Berry		4.8
Sun Country Orange-Pineapple		5.1
Sun Country Original Citrus		5.1
Sun Country Peach Blush		4.9
Sun Country Strawberry Blush		4.8
Sun Country Strawberry Blush	5.0	5.5
Sun Country Tropical Fruit		5.1
Sun Country Wild Jamaican Rum		5.0
White Mountain Cranberry Splash		4.3
White Mountain Cranberry Splash		4.4
White Mountain Cranberry Splash Beer Cooler		4.5
White Mountain Original Citrus Beer Cooler		4.4
White Mountain Tropical Orange Beer Cooler		4.4
White Mountain Wild Raspberry Beer Cooler	4.0	4.3

Table 3. Alcohol content of wine products

Brand	Alcohol %	
	claim	found
Bellagio Berry Wine Product	5.0	5.2
Bellagio Peach Wine Product	5.0	5.1
Bellini White Wine With Natural Fruit Juices	5.0	6.1
Bonetti Peachy Peach Luscious Wine Product	5.5	6.4
Bonetti Wild Berry Luscious Wine Product	5.5	6.4



## The Connecticut Agricultural Experiment Station,

founded in 1875, is the first experiment station in America. It is chartered by the General Assembly to make scientific inquiries and experiments regarding plants and their pests, insects, soil and water, and to perform analyses for State agencies. The laboratories of the Station are in New Haven and Windsor; its Lockwood Farm is in Hamden. Single copies of bulletins are available free upon request to Publications; Box 1106; New Haven, Connecticut 06504.

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