

ACIDIFICATION OF BREWING AND SPARGE WATER

by L. C. Wilson

The suggestion of adding acid to a brewing water certainly seems out of place yet the acidity of a beer is far more important than is generally understood; not only does it give that palate and crispness which is wanted in a beer but at the same time it helps to guard against diseases, notably ropiness. There is no doubt that a beer with a low acidity (a low presence of lactic acid) is liable under certain conditions, to develop ropiness, and even if it does not, the flavour and drinking properties will be imperfect.

[text describing the mechanized addition of diluted acid deleted]

The quantity of hydrochloric acid (or other suitable dilute acid) to be added is found by estimating the alkalinity of the liquor to be used for mashing. Any very great variation in the alkalinity of the brewing liquor is not general and the same quantity of acid (suitably diluted) per barrel can be added daily.

In the case of beers intended for chilling the results of the acid treatment of the water is most marked. It often happens that chilled beers develop a milky haze after having been in bottle only a few days. I have noticed that beers in which the acidity is normal do not develop this haze and the sediments are firmer than in those in which no acid was used. In the case of matured bottled beers the improvement is also pronounced, the sediment, which consists of yeast only, being firm on the sides and bottom of the bottle. The flavour is sound and possesses that crisp bite which is so desirable.

On the cooler the sludge seems to fall quicker and the flocculation is in larger flakes when acidified liquor is used. The treatment appears to be without effect on the fermentation. The forcing samples of the different beers showed a decided improvement, the deposits being cleaner and firmer, the beer remained sounder for a longer period and the tendency for the development of long rods so noticeable in forcing samples was lessened. Moreover the short rods (bacteria) which, from my experience, I associate with ropiness were absent. In those breweries where ropiness occurs from time to time it is probable that a great improvement can be effected by using liquor acidified in the manner I have described.