

THE PRESERVATIVE EFFECT OF GORAKA IN FISH PROCESSING

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Goraka (*Garcinia cambogia*) is used as a preservative in traditional fish preparations such as *Jaadi* and *Ambul Thiyal*. This study aimed to investigate its effect on bacteria and fungi, with a view to expanding its use as a bio-preservative.

The growth of bacteria and fungi on laboratory media incorporated with Goraka, Tartaric acid and Sorbate in combination with these two components was examined. Preliminary work was also carried out to study the effect of Goraka and sorbate dips on the flavour and bacterial flora of fish.

Goraka at pH 4.0 inhibited bacterial growth. The effect of tartaric acid was similar. Goraka combined with 0.2% sorbate, at a higher pH of 5.7, completely inhibited bacterial growth. The inhibition of fungi was effective only with a combination of Goraka and sorbate. A pH of 4.8 and 0.2% sorbate inhibited fungi.

In the preliminary studies with fish, a 2% sorbate and Goraka dip (15 min) at a pH of 5.1 was effective in reducing the bacterial load on the skin of Hurulla (*Amblygaster sirm*) by a significant 1.6 logs. This dip did not change the flavour of cooked Hurulla as judged by a trained panel of 8 members.

This study demonstrated that Goraka was effective as a preservative against bacteria and also improved the performance of sorbate in controlling bacteria and fungi on laboratory media. Goraka in combination with sorbate, used as a dip effectively reduced the bacterial flora on fish which could be used to extend the shelf life of fish.

Further investigations to determine combinations of Goraka with reduced concentrations of sorbate is envisaged for the future.