# EFFECT OF WASHING WITH ACIDS AND CHLORINATED WATER ON MICROBIAL COUNTS ON FISH.

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effect of washing "salaya" fish (Sardinella longiceps) with dilute
s and chlorinated water on the microbial population during storage
studied. Fish were dipped in acetic acid (0.5 to 10%), citric
(5% and 10%) or chlorinated water (100 ppm to 1%) separately for
n. Fish were rinsed with 100 ml of distilled water at 3, 6, 24
30 h after the treatments and total plate counts of the washings
done.

ic acid concentrations below 1% did not reduce the microbial
lation on fish. Acid concentration of 5% were slightly effective.
0% acetic acid the microbial count of the treated fish was three
cycles less than the controls after 30 h. However, the treatment
ed loss of red colour in the eyes. Citric acid (5%) reduced the
l colony count on fish during initial 24 h. However, after 30 h
obial count increased to $10^7$ in both treated and untreated fish.
ish treated with 10% citric acid the total colony count increased
by 3 log cycles, compared to 5 log cycles in in controls after
n. Both controls and treated fish emitted putrefactive odors by
time. Washing with water chlorinated to 100, 200 or 1000 ppm did
reduce microbial counts appreciably; 1% chlorinated water reduced
microbial counts by 3 log cycles. Treatment removed the shiny
earance on the surface of fish.

d concentrations of 10% and chlorinated water at 1% were effective
reducing the increase in microbial population on fish during
rage under ambient conditions up to 30 h.