

ABSTRACT

Spent sorrel (*Hibiscus sabdariffa sabdariffa* L.) was used as a bodying ingredient, together with tomato paste, vinegar, starch, sugar, salt, seasonings, spices, colouring ingredients and tomato flavouring, in the preparation of a simulated tomato ketchup.

Analysis of variance (ANOV) of the responses of untrained panelists to formulations containing 50, 60, 70, 80% sorrel showed no significant difference in overall quality (i) between each of the formulations and pure tomato ketchup (ii) amongst the different formulations.

Of the formulations tested, 70:30 sorrel/tomato ketchup was submitted for consumer evaluation. ANOV of consumers' responses revealed significant difference (at the 1% level) in sweetness and redness when the experimental ketchup was compared with commercial brands of tomato ketchup. This resulted in consumer preference (at the 1% level) for the latter.

Laboratory analysis showed the experimental product to be comparable to leading commercial brands in pH and consistency, but total soluble solids content, colour, acetic acid content, fibre content and occurrence of mold were variable. The only major change occurring during storage of the experimental product after 8 weeks under ambient conditions (24 - 30°C) was due to instability of a colouring ingredient.

The simulated tomato ketchup (70:30 sorrel/tomato) was shown to possess potential for development into a commercial product, the final decision being dependant on the cost of producing the sorrel pulp.