

coliform(colour) [mP-A FC(colour)] and modified presence-absence faecal coliform(pH) [mP-A FC(pH)] tests by McNemar's test showed that (i) the FT and mP-A FC(pH) tests did not differ significantly for natural waters ($p \geq 0.05$ and $p \geq 0.01$), (ii) the FT and mP-A FC (colour) tests did not differ significantly for deep well, piped and rain waters ($p \geq 0.05$) but differed significantly for pond and shallow well ($p < 0.05$), and (iii) the FT and mP-A FC(colour) tests did not differ for deep well, piped, rain and shallow well waters ($p \geq 0.01$) but differed significantly for pond ($p < 0.01$). In terms of validity and efficiency, the FT was the most valid and efficient test. The mP-A FC(pH) was more sensitive and more efficient but was less specific than the mP-A FC(colour) test. Identification of isolates showed that (i) *E. coli* was the most dominant species in natural water samples by the FT technique, and in pond and shallow well waters by the mP-A FC(colour) test, (ii) *Enterobacter* species was the most dominant species in deep well, piped and rain waters by the mP-A FC(colour) test, and (iii) *E. coli* was isolated from all types of water by both the FT and mP-A FC(colour) tests. The faecal coliforms isolated were *Citrobacter freundii*, *E. coli*, *Enterobacter cloacae*, *Enterobacter aerogenes*, *Edwardsiella tarda*, and *Klebsiella pneumoniae*. Several advantages of the mP-A FC tests were: (i) high sensitivity and specificity, (ii) ease of media preparation and examination, (iii) less

time-consuming, and (iv) more feasible than the FT technique approximately three times. Suggestions from this study are: (i) the mP-A FC test should be applied as a screening test in the field for examining the faecal coliform contamination in drinking water, (ii) the mP-A FC(pH) test should be used to examine waters taken from deep well, rain, pond, piped and shallow wells, (iii) the mP-A FC(colour) test should be used to examine waters taken from deep well, piped, rain and shallow wells, (iv) the mP-A FC (colour) test would be useful for the Water Quality Surveillance Programme in rural areas, and (v) the mP-A FC test should be modified further in order to increase its sensitivity and efficiency.