

Efficiency of commercial biological compounds as anticoagulant agents in natural rubber latex

ABSTRACT

This work studied the effect of streptomycin sulphate and surfactin on the stability of field natural rubber (NR) latex. Field NR latex was treated with streptomycin sulphate and surfactin in the absence and presence of ammonia. The stability of NR latex was determined by formation of volatile fatty acid (VFA), enumeration of the bacterial population, measurement of NR latex alkalinity and pH of the latex. Streptomycin sulphate caused significant reduction in bacterial population and VFA formation with an additional advantage as OH⁻ ion stabiliser. Surfactin on the other hand was not suitable as NR latex preservative agent in the absence or presence of ammonia. Although instability of NR latex still appeared, combination of streptomycin sulphate and surfactin showed better control in terms of bacteria and VFA number compared to 0.3% ammoniated NR latex.

Keyword: Streptomycin sulphate; Surfactin; Natural rubber (NR) latex