Rambutan fruits cv. Rong-Rien were dipped in to 3 types of sucrose fatty acid ester: M-1695, P-1670 and S-1670 at concentration of 3,000 ppm(w/v) coating solution and packed in corrugated carton for exporting rambutan 2 kgs per box and stored at 2 ± 1°C, 90% RH in order to determine the effect of sucrose fatty acid ester coating on storage life and quality of rambutan. The result showed that the storage life of uncoated fruits were only 8–10 days, after that the skin colour turn to brown and black in finally. The storage life of coated fruits were 12 days. Rambutan fruits coated with M-1695 showed the best external and internal quality. The fruits coated with p-1670 and S-1670 showed significant browning symptom at the spintern when compared with M-1695 coated fruits. Rate of ethylene production, weight loss, colour change, ion leakage from the peel and off flavour were effectively reduced in coated rambutan with 3 types of sucrose fatty acid ester. Besides, it was found that browning occurrence of rambutan fruits was unitiated at the end area of spintern.