The purpose of this study was to know the effect of ovine semen centrifugation on capacitation and acrosome reaction spermatozoa percentage. The inspection of semen feasibility was done for further treatment. The treatments are semen without centrifugation (P0), semen with centrifugation 1800 rpm for 5 minutes (P1), and semen with centrifugation 1800 rpm for 10 minutes (P2). And then, the capacitation and acrosome reaction spermatozoa is checked by reagent DABCO and CTC. The result showed that on P2 have the highest capacitation (43,33 ± 6,772) that not significant difference with P1, whereas P0 have the lowest effect (29,83 ± 1,169). Acrosome reaction spermatozoa of P2 have the highest result (29,67 ± 3,830) from all treatment samples.

**Key word**: fat tail sheep, spermatozoa, capacitation, acrosome reaction, centrifugation