Suphansa Tathawan 2009: Effect of Immunocastrated Vaccine for Boars (Anti-Gonadotropin Releasing Factor Vaccine) on Production Performance and Meat Quality. Master of Science (Agricultural Research and Development), Major Field: Agricultural Research and Development , Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Sujate Chaunchom, Dr.Med.Vet. 90 pages.

This study was conducted to evaluate the effect of immunocastrated vaccine for boars (anti-gonadotropin releasing factor vaccine, anti-GnRF vaccine) on production performance and meat quality. Pigs were allocated into 3 treatments (castrated boar, boar and immunocastrated boar) and 10 replications per treatment by using completely randomized design. The results showed that the average daily gain (ADG) of immunocastrated boar treatment was 992 g /day ($P<0.01$) and feed conversion ratio (FCR) of three treatments were 2.83, 2.75 and 2.22, respectively. In addition, the back fat thickness by real time ultrasonic of immunocastrated boar treatment had lowest value ($P>0.05$) and the carcass length was longer than other treatments ($P>0.05$). However, loin, ham and belly percent were not significantly difference in three treatments ($P>0.05$) while in immunocastrated boar treatment had the highest percent shoulder meat ($P<0.01$). In term of meat quality, there were not significantly difference on meat color, drip loss, cooking loss and shear force. The sensory test showed that the odor score was not different in castrated boar treatment and in immunocastrated boar treatment ($P>0.05$) but it was significantly difference when compared with boar treatment ($P<0.05$). The tenderness, juiciness and satification scores were highly in immunocastrated boar treatment ($P>0.05$). Moreover, skatole in fat was not effected by treatments ($P>0.05$). However, it was found that the content of skatole in immunocastrated boar treatment was similar to castrated boar treatment (36.6 and 40.34 ng/g). Androstenone content and testis size in boar treatment had highest value among treatments ($P<0.01$).

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