

Volume I



KORAT CHICKEN



ICONC 2019

“Integrated Approach in Advanced Animal Technology and Innovation in the Tropics”

“New Technology for Innovation and Synchrotron Applications”

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The 2nd International Conference on Tropical Animal Science and Production (TASP 2019)

The 2nd International Conference on Native Chicken (ICONC 2019)

July 9-12, 2019

Surasamnan Hotel
Nakhon Ratchasima, Thailand



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Mineral supplementation for improvement of reproduction of Kacang goat raised under tethered grazing system

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Abstract

The suboptimal reproductive performance of tethered Kacang goat does are presumably due to limited feed intake and mineral imbalances. The present on farm trial was aimed to evaluate the effects of mineral supplementation on reproductive performance of tethered Kacang goat does. The study was initiated by a field survey to define the reproductive problems and nutritional status of Kacang goat does raised under tethered system. Samples of forages which are normally consumed or fed to the goat were collected and analyzed for dry matter (DM), crude nutrient, and minerals (Ca, P, Mg, Fe, Cu, Mn, Zn). Complete mineral feed was then formulated to complement mineral deficiency in the forages. The minerals were offered to 15 young Kacang goat females for 16 weeks in three treatments: P0: no supplementation (control), P1: supplemented with mineral meal form, and P2: supplemented with block local mineral. Each treatment consisted of 5 goats as replication. Parameters measured were body weight, blood mineral levels, pregnancy, blood hematology, total protein, progesterone levels. The age of maturity of tethered Kacang goat does varied widely between 5 and 9 months and first kidding between 12 and 23 months. Forages and feeds were poor in DM and macro minerals which were reflected in the blood mineral profiles of the animals. Supplementary mineral gave positive effects on blood mineral, total protein, and hematology, and progesterone levels. Does supplemented with local mineral were detected pregnant earlier than that in the control. It may be concluded mineral supplementation enhanced the nutritional status and reproduction of tethered Kacang goat does. Mineral supplement would be better offered in block form.

Keywords: Kacang goat, local mineral, supplement, tethering

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