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Abstract & Author Information

Prewaning body weights of meat goat kids produced in a three-breed diallel managed on southeastern pastures. R. Browning, Jr.*, B. Donnelly, T. Payton, M. Byars; IAgER-Tennessee State University, Nashville

Birth and weaning weights were recorded for meat goat kids produced over three years in a three-breed diallel involving Boer (B), Kiko (K), and Spanish (S) straightbred sires and dams. Weights were recorded within 24 hr of birth for 781 kids born in March and May of 2004, 2005, and 2006. Kidding season for each mo-yr contemporary group was no greater than 45 d long. Kids were not creep-fed and male kids were not castrated. Weaning weights were recorded for 635 kids at approximately 3 mo of age. Orphan kids were excluded from the weaning dataset. Weaning weights were adjusted to a 90-d standard. Year, month, sex, and litter size at birth each affected ($P < 0.01$) birth weight. Buck kids were heavier ($P < 0.01$) than doe kids (3.32 vs. 3.02 ± 0.05 kg). Single, twin, and triplet kids all differed from each other for birth weight (3.58 , 3.20 , and 2.72 ± 0.06 kg, respectively). The sire breed x dam breed interaction was an important ($P < 0.05$) source of variation for birth weight. Birth weights were heaviest for BxS, BxB, and BxK (3.44 , 3.35 , and 3.32 kg, respectively) and lightest for KxK and SxS kids (2.95 and 2.99 ± 0.09 kg). Year, month, sex, and litter size at birth and weaning each affected ($P < 0.01$) preweaning ADG. Buck kids gained weight faster than doe kids (183 vs. 154 ± 2 g/d). The sire breed x dam breed interaction was an important ($P < 0.05$) source of variation for preweaning weight gain. Prewaning ADG were higher ($P = 0.01$) for BxK and KxK (each 180 g/d) and lower ($P < 0.01$) for SxS, KxS, and BxB (153 , 156 , and 156 ± 4 g/d, respectively). Year, month, sex, and litter size at weaning each affected ($P < 0.01$) 90-d weaning weight. Buck kids were heavier than doe kids (16.1 vs. 13.6 ± 0.2 kg). Single, twin, and triplet kids all differed from each other for weaning weight (17.7 , 15.0 , and 11.9 ± 0.3 kg, respectively). The sire breed x dam breed interaction was an important ($P < 0.01$) source of variation for weaning weight. Weaning weights were heaviest for BxK and KxK (16.3 and 15.9 kg) and lightest for BxB and SxS (13.8 and 13.9 ± 0.4 kg). Sire and dam breeds interacted to influence meat goat kid weights at birth and weaning.