

9<sup>th</sup> World Congress and Expo on

# IMMUNOLOGY, IMMUNITY INFLAMMATION & IMMUNOTHERAPIES

November 02-03, 2017 | Atlanta, USA

## Effect of nutritional status, age, breed, litter size and litter sex on colostral IgG levels of in Ewes delivered in to Kuwait

**Tareq AL-Sabbagh**

Kuwait Institute for Scientific Research, Kuwait

Body condition was measured weekly for sixty two Border Leicester Merino ewes delivered in Kuwait. Scores of body condition, a measure of nutritional status, were collected until lambing. The Body condition score at lambing demonstrated a clinically meaningful influence on the colostrum concentration collected from the ewes within twelve hours of lambing, that did not reach statistical significance ( $P=0.06$ ). Ewes with scores that ranged from 2.5 to 3.5 were superior regarding IgG concentration than those scored higher and lower than this range. Lambs that were born to ewes with body condition score of 2.5-3.5 at lambing weaned heavier than those born to ewes of either higher or lower body condition score at lambing (BCSL) ( $P=0.02$ ). Weaning weights (95 days postpartum) for these lambs were heavier with high score ewes. Sex of lambs born did not affect the quality of colostrum. In general, it was found that colostrum from ewes that gave birth to twins was of higher quality than colostrum of ewes that gave birth to singles. Although not significant, male lambs tended to be born heavier than female lambs whether they were born single or twins. Male lambs weaned heavier than female lambs (23.7 Kg vs. 20.65 Kg, respectively) at the age of 95 days. Time of milk collection was demonstrated to be a significant factor in colostrum concentration. Samples that were collected closer to the time of lambing had higher colostrum concentration ( $P=0.002$ ).