

Survey on the prevalence of caprine arthritis encephalitis virus in Taiwan: Feeding newborn kids with cattle substitute colostrum instead of their maternal colostrum⁽¹⁾

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Abstract

The purpose of this study was to survey the caprine arthritis encephalitis virus (CAEV) antibody in newborn goats raised by cattle substitute colostrum their maternal colostrum and the effect by epidemic control or hygienic management. This survey was conducted from June 2012 to February 2013 in the southern part of Taiwan. Serum samples, which taken from goat's jugular vein in 3, 4, 7, and 10 months of age were assayed by different laboratories. The results showed that the percentage of examination of negative and positive CAEV among newborn kids at 3 months of age by P laboratory were 92.41% (n = 134) and 7.59% (n = 11) ($\chi^2 = 11.8961$, $P = 0.0362$). However, the examination of negative, positive or suspected positive CAEV among newborn kids at 4 months of age by same laboratory were 81.94% (n = 118), 15.97% (n = 23) and 2.08% (n = 23), respectively ($\chi^2 = 16.6246$, $P = 0.0831$). Another report from C laboratory on the same herds of kids also showed that the percentage of examination of negative, positive and suspected positive CAEV among newborn kids at 10 months of age were 75.18% (n = 106), 23.40% (n = 33) and 1.42% (n = 2), respectively ($\chi^2 = 17.0469$, $P = 0.0733$). Evidence showed that feeding newborn kids with cattle substitute colostrum instead of their maternal colostrum can eliminate the prevalence of CAEV on goat herd.

Key Words: Caprine arthritis encephalitis virus antibody, Substitute colostrum, Goat.

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