

Differences in Blood Parameters Associated to Stress Response Between Chilean Rodeo Horses and Chilean Urban Working Horses

González, Igor

Torres, Cristian G.

Chihuailaf, Ricardo

Neira, Víctor

Tadich, Tamara A.

© 2018 Elsevier Inc. Physiological measures, such as blood variables, are commonly used to assess the welfare state of animals. The basal concentration of indicators such as plasma cortisol, white blood cells, cytokines, and indicators of oxidative stress could vary depending on the coping style of individuals. In the case of horses, coping styles could be associated to the activity they perform because owners seek different behavioral characteristics. The aim of this study was to compare blood variables frequently used to assess welfare, between urban working horses and Chilean rodeo horses, and secondly to determine if horses could be classified according to activity and blood variable characteristics associated to coping styles (proactive and reactive). A total of 204 horses were sampled and 13 blood variables were assessed. K-means clusters analysis was used to classify horses in two groups. Significant differences between working horses and Chilean rodeo horses were found for nine