

## **Ranking of endurance horses in training based on some selected biochemical and physical parameters**

### **ABSTRACT**

**Objective:** This study aims to appraise the ranking of endurance horses in training based on some selected biochemical and physical parameters. The increase in skill and gusto in equine endurance sport demands an upsurge in standardized exercise tests and competition to be enforced on endurance sport horses. **Materials and methods:** Nine seemingly fit Arabians endurance horses between the ages of 5 and 17 years and with a body weight of 350 and 450 kg were included in the research in Malaysia. We designed a point scale in training based on biochemical and physical parameters of endurance horses for lactate, plasma protein, creatine kinase, heart rate, and rectal temperature. **Results:** The results indicated an accumulated lower point of 1 for the biochemical and physical parameters for an individual horse to have an excellent ranking in training and placing in endurance race contrasted with horses that had higher points of 4 to 6. The lower the points, the lower will be the values of the parameters and the higher the points the higher will be the values of the parameters. It is observed that placing in race tally with the ranking in training. **Conclusion:** In conclusion, it is observed that placing in race tally with the ranking in training. Therefore, it is suggested that the current ranking system in training could be valid to be used to predict endurance horses performance in an actual race.

**Keyword:** Biochemical parameter; Endurance horses; Physical Parameter; Training