



MINISTRY OF JIHAD-E-AGRICULTURE

Agricultural Research, Education and Extension Organization

Fars Agricultural and Natural Resources Research and Education Centre

Monitoring and registration of the Darehshori horse populations

Research worker: Mazaher Safdarian

Abstract:

Monitoring, identification and registration of the populations and breeds of livestock and poultry in each country is indispensable. These populations, in addition to being the national heritage of the country, are also considered as a global heritage. The registration and monitoring of the Darehshori horse populations as a genetic reserve endangered, of domestic livestock of country on the basis of biometric, functional and reproductive indices along with the molecular identity, was the goal of the project. To do this research, the centres and locations of Darehshori breed of horse rearing in the Fars province were identified and after referring to these units and identifying the latitude and longitude of each centre, the questionnaire designed for biometrical traits completed for each horse. The data were analyzed using the SAS statistical program. Blood samples were collected from 100 horses and sent to the Animal Science Research Institute for DNA extraction and storage at the gene bank. The results showed that the total least squares mean of the two-eye distance, jaw width, head length, muzzle environment, distance between left eye to mouth, left eye to jaw and length of left ear were 19.31, 10.82, 49.95, , 56.86, 27.97, 23.95, and 17.34 cm. The total least squares mean for horizontal length of neck, diagonal length of neck, upper circumference of neck, and lower circumference of neck were 91.55, 107.76, 72.37 and 107.30, respectively. Also, the total least squares mean of traits withers height, croup height, dock-tail height, tail length, straight length of back and loin, curvature length of back and loin, diagonal croup length, chest width, thoracic circumference and waist circumference were 144.29, 145.32, 139.61, 44.91, 65.78, 67.49, 35.62, 33.30, 167.64 and 194.61 cm. For the anterior motional limb, the total least squares mean were 35.73, 29.17, 17.44, 11.57, 17.49, 19.47 and 9.38 cm, respectively, for the length of the left arm, the length of the forearm, circumference of left forearm, length of left hand pastern, circumference of left hand pastern, circumference of left hand hoof and left hand hoof length. The total least squares mean for the traits of the posterior motional limb were 59.73, 40.64, 19.17, 11.53, 18.64, 20.67 and 9.33 cm, respectively for the left gaskin length, length of the left cannon bone, Left cannon bone circumference, left leg pastern length, circumference of left leg pastern, circumference of left leg hoof and left leg hoof length. According to the results of biometrical traits of Darehshori horse breed in this research, these data can be used as an indicator for identification of the Darehshori breed of horses in both males and females

and different ages. It is necessary to pay attention to the use of these data as a indicators, they have to use of reliable characters that two sides of the measurement are clearly identifiable.

Key words: Biometrical traits, Body condition traits, Darehshori, Horse