

The evaluation of reproduction and productivity indices in Polish Konik female lines from the Stud Farm Dobrzyniewo

Summary

Results of reproduction and productivity of 63 Polish Konik mares from the Stud Farm Dobrzyniewo in 1980-2003 were analyzed. Eight dam lines were evaluated: Liliputka I (6 mares), Tygryska (15 mares), Karolka (16 mares), Zaza (5 mares), Urszulka (5 mares), Tarpanka I (12 mares), Ponętna (2 mares), Tunguska (2 mares). Average reproduction results equalled to: lack of heat – 1,2%, infertility – 11,9%, pregnancy rate – 86,9%, abortion – 3,7%, stillbirth rate – 3,5%. According to dam lines, best reproduction rates were obtained for Liliputka I line: lack of heat – 0,0%, infertility – 5,4%, pregnancy rate – 94,6%, abortion – 0,0%, stillbirths – 0,0%. This line was also characterized by very good productivity indices fertility and fecundity – 94,6%, percentage of live raised foals – 100%, female material production – 22,8%, male material production – 11,4%. Alarmingly lower indices were recorded for Ponętna line: fertility – 76,9%, fecundity – 69,2% and the production of female and male breeding material were 0,0%. This line, similarly to the line of Tunguska, might be endangered as it was represented by only two broodmares. Restoring of herd in other families ran correctly, since the rate of female material production oscillated between 13,3% in Zaza line and 30,8% in Tunguska line. The highest male material production rate was observed in Urszulka line – 13,8% with the herd average of 8,5%. This line was also characterized by the longest average pregnancy length (334,1 days). The length of pregnancies ended by male deliveries ranged from 324,2 days (Ponętna line) to 334,5 days (Karolka line) whereas for female deliveries the length averaged from 319,5 days (Liliputka I line) to 335,4 (Urszulka line). Dam line and sex of foal had significant effect on the pregnancy length.