



Reproduction development and efficiency of six selected Standardbred broodmare farms in New Zealand

Katharina Mareike Langhans¹; Peter Theobald¹; Dirk Winter¹; Chris Rogers²

¹ University of Applied Sciences Nuertingen-Geislingen, Germany

² Massey University Palmerston-North, New Zealand

This survey aimed to evaluate reproduction facts and management data of the six largest

Standardbred breeding farms in New Zealand. The study was realized in August 2015 as a retrospective and qualitative face to face survey and was a cooperation between the Massey University (Palmerston North, New Zealand) and the University of Applied Sciences Nuertingen-Geislingen.

The six involved stud farms had about one third (965/2885 in 2013/14) of the national Standardbred-broodmares in New Zealand (HRNZ, 2015). Therefore general numbers of broodmares and foals for the 2013/2014 breeding season were collected.

Compared to the breeding season 2014/2015 there was a decline of -13.7 % of the total number of broodmares on these farms. Differences between the reproduction management, in special the pregnancy rates, the live foal rates and the abortion rates between the farms were found. To detect possible reasons for the differences of the breeding success on the farms the feeding situation of the broodmares were analysed with special regard to risk factors which may effect

the differences that may cause wastage in the breeding industry. Due to the intense physiological relation between dam and foetus, the soundness and prospective racing ability of the offspring are influenced by the nutrition of the mares especially during the last part of gestation (Redmer et al., 2004). Due to the fact that horses in New Zealand are often kept on pasture the whole year (Grace et al., 2003; Hoskin & Gee, 2004; Rogers, 2007), paddock composition and complementary feeding especially during the winter were points of interest of the survey. The feeding practices on the six stud farms were different. Apart from feeding on pasture there were also some farms which kept the mares on kaele or on green oats. Other farms did not feed their mares adequately with complementary feed (like minerals). As reported greenfeed for broodmares may cause hypothyroidism in foals (Allen, 1996) and a lack of minerals may cause orthopaedic diseases (Meyer et al 2014) and can also influence the fertility of horses. The results of this survey may indicate a correlation between the feeding programs on the studs and the reproductive efficiency. Nevertheless, additional studies are necessary.

Keywords:

reproduction, management, Standardbred