

De artikelen, waarvan hieronder samenvattingen volgen, zijn gepubliceerd in de Nederlandsche taal in „Verslag van de gewone vergadering der Afdeeling Natuurkunde van 25 Maart 1944, Deel LIII, No. 3”.

The articles, of which summaries follow below, have been published in the Dutch language in „Verslag van de gewone vergadering der Afdeeling Natuurkunde” of March 25th, 1944, Vol. LIII, No. 3.

Les articles dont les résumés suivent ci-dessus, ont été publiés en langue néerlandaise dans le „Verslag van de gewone vergadering der Afdeeling Natuurkunde” du 25 mars 1944, Tome LIII, No. 3.

Zoology. — KREDIET, G.: *Free-martins*, p. 91.

NUMAN has already pointed out the possibility of a change of sex in the development of free-martins, but owing to the views then prevalent he could not accept this opinion. He did not wish to consider them as hermaphrodites, but took them for a form of „Hemmungsbildung”. KELLER and TANDLER first pointed out the connection existing between placental anastomosis and the development of free-martins, they thought that the female animal might be influenced by the male one, but not by testicular hormones, as LILLIE thought, but in a more general form. On the whole we may say that chromosomal factors are the cause. That usually the female animal undergoes the changes is a consequence of the usually stronger epistasis of the male calf, but changes of the genital apparatus and the secondary sex characteristics of the latter are not impossible, when a „strong” female animal is connected with a „weak” male through placental anastomosis.

The fact that only in *Artiodactyla* free-martinism occurs with chorial connection of the vessels, is not in favour of the theories of KELLER and TANDLER and of LILLIE. All experiments made to prove in mammals that testicular hormones are the substances causing the barrenness, have failed.

The changes caused in the free-martin occasion intersexuality, greatly different from that known as zygotic intersexuality. They are reminiscent of intrauterine castration with retention of the gonads, which, however, are functionless as regards the formation of germ cells and hormones. A neutral type, the „free-martin” type has developed, which still shows female characteristics in the case of slight changes, and male characteristics in the case of great changes.

Zoologie. — KREDIET, G.: *Vaches-boeufs*, p. 91.

NUMAN a déjà signalé la possibilité que la formation des vaches-boeufs serait due à un changement de sexe. Cependant les opinions répandues en