er did not improve the spermatozoa survival, it allowed to preserve the fertilizing ability one more day than with the BL_1 extender. It could be used till the third day after collection since, in this case, the gestation rate was still 77 p. 100.

Effects of feeding maize contaminated by fusarium to sows

M. ÉTIENNE, M. JEMMALI

Station de Recherches sur l'Élevage des Porcs,
Centre national de Recherches zootechniques, I.N.R.A.,
78350 Jouy-en-Josas (France)

Laboratoire de Technologie Alimentaire, Service des Mycotoxines, I.N.R.A.,
16, rue Nicolas-Fortin, 75013 Paris

An experiment involving 38 Large White gilts was undertaken in order to determine more accurately the effects of consumption of maize contaminated by *Fusarium roseum*, on reproduction. Females entered the experiment on puberty, were sired at the second œstrus and slaughtered after 80 days of pregnancy. They were divided into 3 groups receiving different feeds before and after mating: control feed without mycotoxins, or a contaminated one containing 3.61 mg zearalenone/kg.

Ingestion of the contaminated feed by mature non pregnant gilts (2nd group) led to pseudopregnancy in more than half (7/13) of the animals: the non return to œstrus for 45 days following puberty was confirmed by the absence of Corpora albicantia, maintaining of corpora lutea and uterus hypertrophy. These signs were also evident in 2 females of the 3rd group which were not mated and which received the contaminated diet after service. The œstrogenic properties of zearalenone already demonstrated in immature animals was thus confirmed in mature gilts.

In comparison with the control group (1st group), intake of maize contaminated by Fusarium roseum after service (3rd group) did not affect corpora lutea weight, litter size (8,9), embryonic mortality (32 p. 100) or the number of abnormal fœtuses after 80 days of pregnancy. However the weight of uterine horns, placenta and fœtuses decreased by 25, 37 and 26 p. 100 respectively.

Intake of zearalenone in breeding gilts principally led to a prolonged period of anœstrus and a decrease in the development of the concepta. This may explain some of the reproductive disorders reported after mouldy maize consumption by sows: lower fertility rate, abnormal œstrus returns, increase in the mortality of embryos and newborn piglets.

Easy establishment of weaning batches for gilts owing to the use of a progestagen (RU 2267)

Françoise MARTINAT-BOTTE (1), F. BARITEAU (2), J.-P. SCHEID (3), J. GAUTIER (2), P. MAULÉON (2)

(1) *I.T.P., 149, rue de Bercy, 75595 Paris Cedex 12*
(2) *Station de physiologie de la Reproduction,*
Centre de Recherches de Tours, I.N.R.A.,
Nouzilly, 37380 Monnaie (France)
(3) *Département de Recherches Vétérinaires,*
Roussel-Uclaf, 35, bd des Invalides, 75323 Paris

Three hundred and thirty one 6 to 8 month old gilts were treated with a component possessing a progestational activity RU 2267. After the end of the treatment (18 days, per os, 20 mg/d/gilt) half of the batch was systematically inseminated on days 6 and 7 (in heat or not); the