

METHODS OF ESTRUS SYNCHRONISATION FOR FACILITATING SWINE
ARTIFICIAL INSEMINATION.

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I. The following abbreviations are used:

AI - artificially inseminate
PMS - pregnant mare serum gonadotrophin
HCG - human chorionic gonadotrophin
SC - subcutaneous injection
IM - intramuscular injection
IU - international unit
Regu-Mate - trade name for progestin
PGF_{2α} - prostaglandin F_{2α} sold under trade names
Estrumate and Lutalyse

II. Weaned Sows

- a) PMS 790-1000 IU SC within 12 hr post weaning
HCG 500-1000 IU IM 72-84 hr post PMS
AI twice - 24 and 36 hr post HCG
or
AI once - liquid 26-32 hr post HCG
- frozen 30-34 hr post HCG
Can also use only PMS and AI 24 and 36 hr post first
standing estrus.
- b) PG600 (400 IU PMS and 200 HCG) single IM injection
within 12 hr post weaning.
AI 24 and 36 hr post first standing estrus.
- c) PMS treatment, PMS plus HCG or PG600 also helpful in
preventing breeding slump during hot months and with
first litter gilt nursing large litters.

III. Lactating Sows

- a) PMS 1000 IU SC
HCG 1000 IU IM 72-96 hr post PMS
AI twice 24 and 36 hr post HCG
or
AI once - liquid 28-32 hr post HCG
- frozen 30-34 hr post HCG
PMS treatment should not begin prior to 15 days post-
partum and preferably 20 days for maximum conception
rate.

IV. Non-cycling Gilts or Sows

- a) PMS 500-1000 IU SC
HCG 500-750 IU IM 72-96 hr post PMS
AI twice - 24 and 36 hr post HCG
or
AI once - liquid 28-32 hr post HCG
- frozen 30-34 hr post HCG

Can utilise only PMS and AI 12 and 24 hr post first standing estrus for gilts

or

24 and 36 hr for sows.

b) PG600 (400 IU PMS and 200 IU HCG) single injection IM.

AI 12 and 24 hr post first standing estrus for gilts or 24 and 36 hr for sows.

V. Cycling Gilts or Sows

a) Feed Regu-Mate at rate of 14mg/day for gilts or 30mg/day for sows for 18 days. (Regu-Mate not USDA approved for swine)

1) Remove Regu-Mate from feed

AI 12 and 24 hr post first standing estrus for gilts or 24 and 36 hr for sows.

2) Remove Regu-Mate from feed

PMS 500-1000 IU SC 24 hr post last Regu-Mate feeding

HCG 500-750 IU IM 72-96 hr post PMS

AI twice - 24 and 36 hr post HCG

or

AI once - liquid 28-32 hr post HCG

- frozen 30-34 hr post HCG

3) Remove Regu-Mate from feed

PMS 500-1000 IU SC 24 hr post last Regu-Mate feeding

AI 12 and 24 hr post first standing estrus for gilts

or

24 and 36 hr for sows.

b) Breed Cycling Gilts or Sows at Natural Estrus

Abort at 15-40 days pregnancy

10-15mg Lutalyse or 175-250 mcg Estrumate IM

5-10mg Lutalyse or 75-175 mcg Estrumate IM 12 hr post first Lutalyse or Estrumate injection.

500-1000 IU PMS SC 12 hr post Lutalyse or Estrumate

500-1000 IU HCG IM 72-84 hr post PMS

AI twice - 24 and 36 hr post HCG

or

AI once - liquid 28-32 hr post HCG

- frozen 30-34 hr post HCG

PMS and/or HCG optional in which case AI 24 and 36 hr post first standing estrus.