I. — REPRODUCTION

Artificial insemination in the pig : recent technical advances

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This paper reports on fertility results obtained after A.I. in pigs under practical conditions. Semen can be packaged in doses ready for use (3.10^9 spz. in 100 ml, stored at + 15 °C) without decreasing fertility when compared to the classical method (35 ml ampullae which need to be rediluted at the time of insemination). B.L.I. diluent allows semen preservation for 3 days, i.e. one day more than I.V.T., without decreasing fertility, but 2 doses per A.I. have to be used with D_3 semen. Prolificacy is increased by 0.27 piglet with B.L.I. diluent. Fertility varies according to the physiological conditions of the sow; in sows inseminated within 9 days after weaning, the farrowing rate is significantly higher than in gilts or in sows inseminated later than 9 days after weaning. Fertility decreases with increasing No. of A.I.

Effect of various thawing solutions on the fertilizing ability of boar spermatozoa

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This note deals with the effect of various thawing solutions (INRA - ITP, INRA - ITP + Caffeine and BTS) on the fertilizing ability of boar spermatozoa. At thawing, caffeine (0.6 mM) mixed with the INRA - ITP solution improved the proportion of mobile spermatozoa and their motility. The BTS solution did not improve the proportion of live spermatozoa, but increased their motility. After 3 hours of incubation, the INRA - ITP solution ensured a better maintenance of the survival of spermatozoa than when caffeine was added to this solution or when BTS was used. Addition of caffeine to the INRA - ITP solution did not improve the gestation rate and the embryonic survival. However, the INRA - ITP solution with or without caffeine as compared with the BTS solution improved the gestation rate and the embryonic mortality.