Each line is propagated by selecting from the first brood of a young female on the day this first brood is released from the brood pouch. The selected young are placed each in an individual bottle with standard food and though examined daily are otherwise undisturbed until the first brood of the next generation appears, when the selections are made as before. Several of these lines have passed the 95th generation and one has just reached the one hundredth generation without the appearance of sexual forms in any generation. All the individuals of the first broods of each generation have been under more or less close scrutiny until they themselves reproduced. If any, or at any rate, many males had occurred they must certainly have been noticed. The method of rearing the daphnids (in individual bottles) has precluded the possibility of sexual reproduction even had males been abundant in the cultures.

There is no evidence of decreased vigor or loss of vitality in the lines. Hence it appears that there is not a necessary sexual cycle in the reproduction of this daphnid. Male daphnids, apparently of this species, have been collected at Cold Spring Harbor since this work was begun. These facts would lend evidence (if additional evidence were necessary) that the sexual cycle in *Daphnia pulex* is not an inherent necessary thing but that it is determined by environment.

Simocephalus, presumably *Simocephalus vetulus*, has been reared for 76 generations in one line, likewise without the appearance of sexual forms.

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The comparative importance of pressure and of toxicity of trikresol in subdural injections of sera.

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As a result of several accidents reported as being due to intraspinal administration of antimeningococcus serum containing trikresol, a number of tests were made on dogs to determine if possible whether the fatal results were due to the influence of trikresol in the serum, to the serum per se, or whether they were due to pressure.

The records were taken with the kymograph, the pressure being taken at the carotid artery. The injections were made into the vertebral artery, the femoral artery and vein, the carotid artery and into the spinal canal.

The results which are somewhat contradictory, were as follows:

An antimeningococcus serum which had produced rashes and other disturbances in patients, caused well-marked depressions in 6.5 c.c. doses. Preservatives were chloroform and 0.4 per cent trikresol. The injections were made into the femoral vein. A whole antipneumococcus serum preserved with chloroform tested in the same way produced death.[1]

Experiments (by F. and A.) with antimeningococcus serum to which was added varying quantities of trikresol (from .1 per cent to .4 per cent) gave no deleterious results when first mixed, but after standing one week in some cases depressions were obtained.

An injection of 2 c.c. of antimeningococcus serum prepared 19 days before the experiment by the addition of .4 per cent trikresol was made into the vertebral artery. A marked depression resulted. Six c.c. of this serum also injected into the vertebral artery caused immediate clotting and were followed by a convulsion with almost complete cessation of respiration.

Further experiments carried out (by F., A. and Z.) on six dogs gave the following results:

1. As a rule, there was apparently no marked disturbance of blood pressure in normal dogs immediately after the lumbar subdural administration[2] by gravity or careful gentle pressure of moderate doses of antimeningococcus sera containing .3 per cent trikresol.

2. Similar injections were made without marked disturbance in blood pressure of physiological saline solution, "*old*" antimeningococcus serum, antimeningococcus serum containing .3 per cent and .4 per cent trikresol, plain normal horse serum, normal horse serum containing chloroform, antistreptococcus serum containing chloroform and antipneumococcus serum containing chloroform.

3. Pressure appears to be a factor of real danger.

[1] Vide, "Some Vaso-reacting Substances in Blood Serum," PROC. OF SOC. FOR EXP. BIOLOGY AND MEDICINE, 1912, LX, pp. 49–51.

[2] Lumbar puncture with skin incision through the skin and muscles was employed. Laminectomy was not used.