

Data upon the preferences of sixty-five animals have been made available to us. These have been classified in the accompanying table:

Positions	Animals preferring positions
A	12
B	34
C	2
D	4
E	12
F	1

In this it can be seen that dogs of the Dalmatian breed definitely differ with regard to the eagerness with which they follow horses and carriages. Since approximately 70 per cent of the animals tested choose those positions which entitled them to be rated as 'good' coaching dogs, it is evident that this trait is deeply entrenched in the breed.

We have also grouped these individuals according to their family relationships. Such classification shows that among the descendants of parents having a 'good' rating similar ratings predominated. On the other hand, matings of a strain headed by a champion Dalmatian who was 'poor' at following a coach gave descendants who also were 'poor' through three generations.

Thus it appears (1) that the tendency of Dalmatians to follow horses and carriages falls into several different grades and (2) that these gradations may be transmitted to descendants. It is planned to publish our data and their analysis in detail later. Meanwhile, since training of Dalmatians for running with carriages has nearly disappeared in America, we appeal to readers of NATURE who have observations upon the responses of Dalmatians to training for coaching to communicate with us.

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Oligodynamic Control of Eelworm (*Heterodera marioni*)

FURTHER researches relative to Nägeli's discovery (1893) of the oligodynamic action of various metal ions revealed that the silver ion in strongly diluted solutions (0.9-0.01 mgm. silver per litre) possesses high germicidal properties.

Various countries are already applying this principle to the sterilization of preserves, drinking water and swimming baths as well as for medical purposes.

Even small animal beings, the size of fish larvæ, etc., are exterminated by these solutions, whereas higher organisms are not detrimentally affected.

At the Tobacco Research Station, Trelawney (Southern Rhodesia), these data were made a starting point for an entirely new method of practical eelworm control as against the 'classical' chemical and agricultural methods, which hitherto have not succeeded in solving the problem.

The first tests were made *in vitro* with a solution of silver nitrate (1 mgm. per litre). From one to three quarters of an hour was sufficient to kill all larvæ. In the tobacco plant no harmful influence could be detected with solutions weaker than 1:10,000. The practical application, however, presented some difficulties: (a) because of the photosensitive property of silver salts, rapidly rendering the solutions inactive to a large extent; (b) because of the strong affinity of silver ions as regards organic matter adsorbing the silver. These difficulties could be overcome by the application of soluble, organic

silver compounds. In a field experiment the best results were obtained with *silver proteinate*. Of the plants treated only 7 per cent (= B) were infested as compared with B = 90 per cent in the controls. Moreover, the average degree of infestation (= A) of the diseased, treated plants was less than 5 per cent, while A constituted 26 per cent in the controls.

This gives us the following relative figures: $\frac{A \times B}{100} =$

0.36 in the plants treated as against $\frac{A \times B}{100} = 23$

in the controls, that is $\pm 1:64$. Only 500 gm. silver proteinate per acre (± 0.1 gm. per plant) was used at a cost of 21s. per acre. The silver proteinate was mixed with the fertilizer and applied in standard cups. As the controls had not reached 100 per cent and the outlay allowed for a larger dose per acre, hothouse tests were afterwards made with 0.3 gm. per plant (about 3 metric pounds per acre). This gave the required 100 per cent control.

Further research is in progress to determine the minimum quantity of silver proteinate with optimal effect, the action on the latent stages (for example, the ova) and the application of silver proteinate to the disinfection of river water, utilized for watering seed-beds, as well as the action of other, possibly preferable, silver compounds.

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Propagation of the Agent of Measles in the Fertile Hen's Egg

IN the several reports in the literature concerning attempts to propagate the agent of measles in the fertile hen's egg, data on the demonstration of the agent by experimental inoculation into those species which are generally regarded as susceptible, namely, humans and monkeys, have been lacking or inconclusive.

In the course of experiments on measles, we have initiated several independent sets of serial egg transfers with Seitz filtrates of throat washings (obtained through the courtesy of Dr. Joseph Stokes, jun., and Dr. Aims C. McGuinness of the Children's Hospital, Philadelphia) collected in broth from different measles patients on first appearance of the rash. Despite the fact that lesions in the chorioallantois or viscera of the embryo were not regularly observed, pooled broth emulsions of these tissues have been passed from egg to egg by the method of Burnet¹, and rhesus monkeys have been inoculated in order to detect the presence of virus. With the first strain after four such egg transfers, and with two other strains (each initiated with washings from different patients) after five egg passages, the monkeys inoculated with embryonic material showed after variable inoculation periods coryza, malaise and a typical maculo-papular rash² with subsequent branny desquamation. Two of the monkeys also showed a definite neutrophilopenia.

A characteristic maculo-papular rash without other accompanying symptoms was observed in a monkey on the 12th-16th days after infection with 12th egg passage material of one strain and on the 10th-11th days in a monkey given 29th egg passage material of another strain initiated by unfiltered human measles blood. Two monkeys inoculated with material from