rally and experimentally infected with *Litomosoides carinii*.

Scott and Cross's observation occurs not infrequently in our experience as a result of worms dying in transit through the fatty lymphoid tissue in the region of the superior mediastinum near the hilus of the lung. This is accidental. But a characteristic feature of the infection is a generalized or spotty proliferative reaction of the visceral and parietal pleura which, in its final phase, results in papillary nodulations of the superfices. Neither the worms nor the nodules invade the lung proper, though it shows reaction to the infection. The spleen is hypertrophied.

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The Effect of Thiouracil Upon Pigmentation in the Tadpole

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In the course of experimental work concerning the effects of thiourea and thiouracil[1] upon the thyroid glands of tadpoles (*Rana sylvatica*), the latter drug was found to cause pigmentary changes which seem worthy of record.

The tadpoles used in this work were obtained from eggs collected in near-by Maryland. The animals were raised in large finger bowls with 20 tadpoles in each bowl and were fed a diet of boiled spinach, Pablum, and boiled egg. Ten of the cultures served as controls, being kept in tap water; in the case of 10 others the culture fluid was a .05-per cent solution of thiourea, and that of another 10 was a .05-per cent solution of thiouracil. These treatments were started on 19 March 1945, when the tadpoles were in the tail-bud stage. The culture fluids were changed every other day. On 4 April, 16 days after the beginning of the experiment, it was noted that the animals in the thiouracil series were considerably lighter in color than were those in the other two groups. This difference became more striking, so that by 14 April (26 days) all tadpoles of the thiouracil series showed very marked blanching with the melanophores contracted in a manner similar to that seen in hypophysectomized specimens. By this time the inhibiting effect of the drugs upon metamorphosis, reported by other authors (*1, 2*), was clearly evidenced, the controls showing rapid growth of the hind limbs, while the experimental animals of both sets had only rudimentary limb buds. Detailed results of the experiment as they relate to the thyroid and metamorphosis will be reported elsewhere. By 4 May (56 days) 80 per cent of the controls had metamorphosed while none of the experimental animals had shown any signs of metamorphosis. At this time, therefore, the treatment was discontinued and the experimental animals transferred to tap water. The thiourea-treated tadpoles did not begin to metamorphose despite discontinuance of the treatment, and on 27 July (129 days) no increase in hind-limb length had occurred in this group. This does not accord with previously reported results (*1*), but the difference may be related to the slightly higher concentration used in the present experiments. The animals of the thiouracil series, on the other hand, showed signs of the initiation of metamorphic changes very quickly after their removal to tap water. By 26 May (67 days) 50 per cent of these specimens exhibited definite elongation of the hind limbs, and by 11 June (83 days) 80 per cent had metamorphosed. Moreover, these specimens resumed the normal dark color quite rapidly, so that within a week after the thiouracil administration ceased, all of the tadpoles showed the same degree of expansion of the melanophores as had been seen in the controls.

It appears that thiouracil has some specific effect upon the melanophores of the tadpole and that such an effect is not produced by a similar concentration of thiourea. Work is now in progress to ascertain whether this action is exerted directly upon the melanophores or indirectly through the intermediation of the pituitary gland.

Juhn (*3*) has reported an effect of thiouracil upon the pigmentation of the feathers of Brown Leghorn capons, but this is apparently to be attributed to the inhibition of thyroid function by the drug, since it is similar to the pigmentary change which follows thyroidectomy in this animal.

[1] The drugs used were supplied through the courtesy of the Lederle Laboratories, Inc.

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