"Strain" and Susceptibility to Parasitism.—Some years ago a marked difference was observed in the degree of parasitism between sheep which seemed to be associated with breed strain. A slight degree of resistance was associated with a fleshy build of animal compared with extreme susceptibility in a lean type. A local sheep-breeder happens to be breeding two strains which conform to the types referred to. The work of following the course of parasitism in extreme representatives of these "strains" is in progress.

There are difficulties in defining what "strains" are, and dangers of confusing causal connections with events running parallel. There is no suggestion at the moment that selecting strains with a breed for resistance is a practicable possibility. Breed differences, however, in resistance to parasitism have been demonstrated in a number of instances by overseas workers.

The Role of Pregnant Ewes in Lamb Parasitism.—Opportunity was provided during the year, by the breeder referred to above, to make observations on this question.

Seasonal Nature of Parasitism in Sheep.—While the seasonal nature of parasitism in sheep has been established in Massey College studies over a number of years, observations continue to be made whenever opportunity makes it possible. This year information was provided from two flocks, one at Massey College and the other on the farm of a local farmer. In each case parasitism was of the traditional pattern with the difference that whereas the large stomach worm, Hæmonchus, was abundant in the Massey flock this species was absent from the other flock. Such information has a particular value on the question of the extent to which the pitch of parasitism may be forecast.

Relative Specific Infectability.—Sheep reared under shed conditions were infected with known populations of two species of round worms, with the object of determining what intensity of parasitism would result. This information is required to supplement data derived from the study of the seasonal populations of parasitic larvæ to which sheep are exposed in the field. Actual populations of larvæ on pasture have not been studied beyond a preliminary stage.

The Effect of the Parasites on the Host.—How injurious parasites are to sheep has been problematical for many years. Since farmers carry out their drenching programmes when parasitism is at a sub-pathological level, the question may be asked how "economic" is this. Previous Massey work has established the nature of the seasonal succession in parasitism. A following step is to establish the strategic times to apply measures of control. It is possible that drenching begins too early in the season. Not only have parasites been at sub-pathogenic levels and drenching, therefore, has been unnecessary, but the immunizing effect of the slow accumulation of parasites has been lost. Caution is necessary in advising farmers on this matter, and at present it is premature to advise the omission of early drenching.

This year a Massey flock was used, and the experiment is still proceeding, to establish the intensity at which symptoms of parasitic disease may develop. Data are being secured per medium of egg counts conducted on sheep fæces and regular weighings of sheep.

Special-purpose Pastures and Parasitism.—An opportunity has been provided to observe, by means of egg counts carried out on fæces of sheep, the bearing of special-purpose pasture grazing on the intensity of parasitism. Under this form of pasturing there is a heavy carrying-capacity and the problem is presented of how much improved nutrition counteracts the risk of greater parasitism through having larger than normal populations of sheep.