

In order to compare the number of branches per tassel with the ears per plat, 100 was taken as the number on the plats with no manure in each case, and the others expressed in relative numbers.

RELATIVE NUMBER OF BRANCHES PER TASSEL AND EARS PER PLAT

Manure Applied	1911		1912		1913		Average	
	Branches per Tassel	Ears per Plat	Branches per Tassel	Ears per Plat	Branches per Tassel	Ears per Plat	Branches per Tassel	Ears per Plat
None....	100	100	100	100	100	100	100	100
5 tons...	112	107	109	127	129	127	121	121
15 tons..	115	107	125	132	157	160	127	132

The effect of the irrigation water on the number of branches per tassel and the ears per plat is expressed in the following table, which is an average of the three years' results.

EFFECT OF SOIL MOISTURE ON THE NUMBER OF BRANCHES PER TASSEL AND EARS PER PLAT

Water Applied	Number Plats Each Year	Number Branches per Tassel	Number Ears per Plat	Relative Number of	
				Branches per Tassel	Ears per Plat
None.....	6	16.25	69.28	100	100
5 inches....	6	16.78	76.05	103	110
10 inches...	6	16.33	71.27	101	103
20 inches...	6	16.49	77.38	102	112
30 inches...	6	17.15	73.28	106	106
40 inches...	6	16.56	75.28	102	109

These tables show that the number of branches per tassel is affected by the condition of the soil, and that there is a close relationship between the tassel branches and number of ears produced.

It seems clear, therefore, that the staminate and the pistillate flowers of maize are affected by the same conditions.

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ASCARIS SUUM IN SHEEP

AN autopsy of an eight-months-old lamb upon which with others of the same age, a feeding experiment was being conducted revealed the presence of two female ascarids in the small intestine. By the aid of the key in

Ransom¹ these were diagnosed as *Ascaris ovis*. These lambs, however, were being fed and kept in pens, previously occupied by hogs, known to be infested with ascarids. The pens had been thoroughly cleaned out before the lambs were placed in them. An examination of the feces in the light of this information emphasized their close similarity if not identity to *Ascaris suum*.

The mothers of these lambs were shipped up from the Carpenter Test Farm in the spring of 1912. No ascarids have ever been found in the sheep on this farm. The examination of the feces of the ewes from which these lambs were raised has never revealed the presence of ascarids. It appears highly probable, therefore, that the lamb got its infestation from the pen in which it was kept and that the eggs from which the worms developed were deposited in the pen by the infested hogs which previously occupied it.

The status of the different species of ascarids affecting man, swine and sheep seems to be somewhat in question. It is considered questionable by some authors whether *Ascaris ovis* (sheep) represents a distinct species, or whether it is simply *Ascaris lumbricoides* (man) or *Ascaris suum* (pig) in an unusual host. Circumstantial evidence in the case here recorded strongly indicates that this statement may be true. It is also questioned by some whether *Ascaris suum* and *Ascaris lumbricoides* represent distinct species. In fact, Neveu-Lemaire² does not consider the differences between these worms marked enough to establish a separate species and reduces *Ascaris suum* Goeze, 1872, and *Ascaris suilla* Dujardin, 1845, to synonyms. He calls the ascarids of these two different hosts *Ascaris lumbricoides* Linne, 1758. Feeding experiments may serve to clear up this confusion.

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¹ Ransom, "The Nematodes Parasitic in the Alimentary Tract of Cattle, Sheep and other Ruminants," 1911.

² M. Neveu-Lemaire, "Parasitologie des Animaux Domestiques," 1912.