

Subsequent observations show that where the *Spartina* meets the advancing *Juncus* or *Leptocarpus* it penetrates for a short distance, but is dominated and suppressed by both indigenous species. The dense growth of the rush cuts off the light, and at the same time the presence of *Juncus* or *Leptocarpus* shows that the level is higher than the optimum for *Spartina*, while the mud is much firmer than suits *Spartina* best. It would also appear that *Scirpus americanus* is a potential dangerous competitor, favouring as it does muds rather softer than those on which the *Juncus* and *Leptocarpus* flourish. The mounded top of the main patch of *Spartina* has now been invaded by

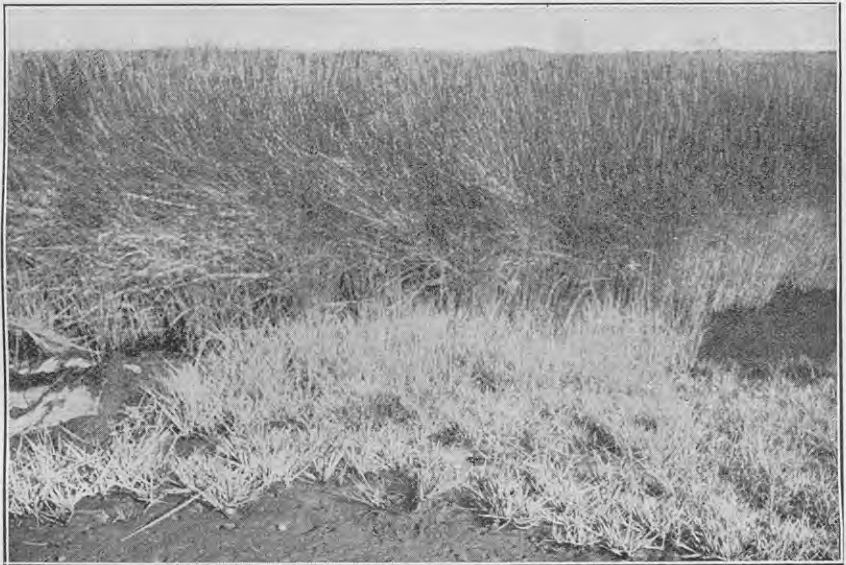


FIG. 5. SMALL PATCH OF SPARTINA COMING INTO COMPETITION WITH ADVANCING JUNCUS.

Juncus, apparently from seedling attack. There are now well established on it five clumps that have reached the flowering stage. Thus the higher parts of the patch appear likely to be dominated by the *Juncus*.

OTHER EXPERIMENTAL AREAS.

Numerous small clumps have been taken by Mr. Dalrymple and distributed for experiment elsewhere. Some of the localities are Kaitaia, Kaeo, Maharau, Kaipara Harbour, Kaukapakapa, Waiuku, Whangarei, Tauranga, Tutaekuri estuary, mouth of Hutt River, and Blind Bay. No definite reports are as yet available concerning the fate of these experiments, but it is hoped to secure and publish such later.