

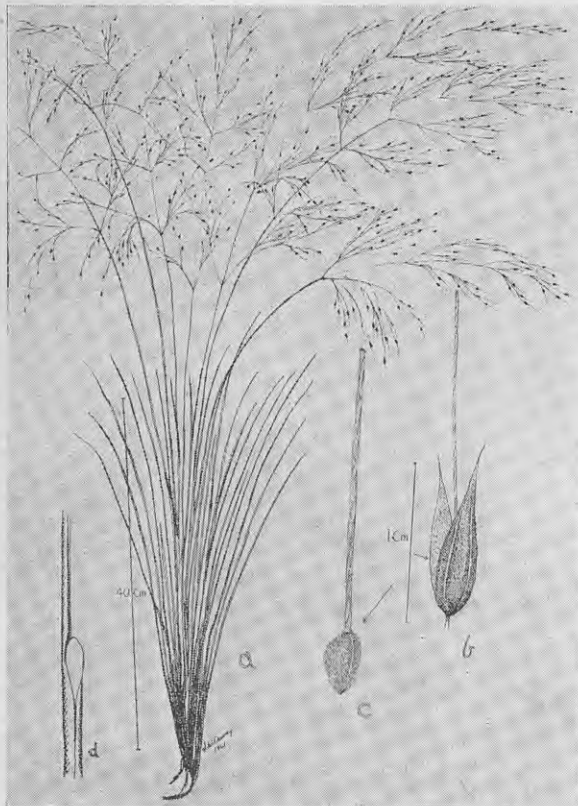
NASSELLA TUSSOCK

Nassella tussock has become a very serious menace in the Waipara County, Canterbury, and a comprehensive survey is being made to determine the most effective control measures

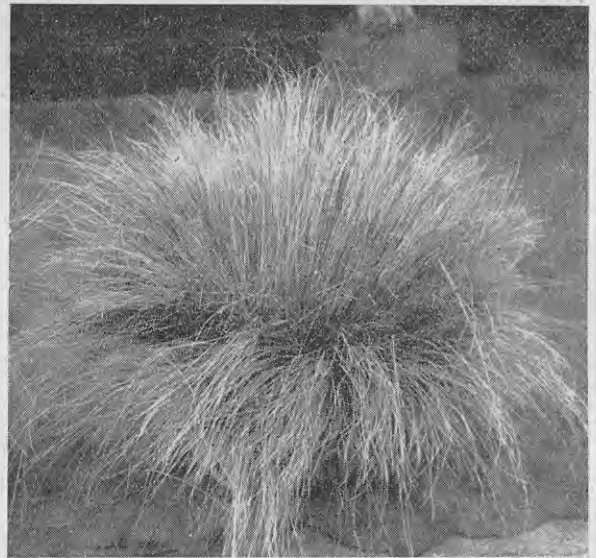
and to decide on a concerted line of action. A description of the characteristics of *nassella* and a plan of the survey are given in this article.

Survey To Determine Most Effective Control

By DR. H. H. ALLAN,
Director, Botany Division,
Plant Research Bureau, Wellington.



Nassella tussock: a, portion of plant; b, spikelet; c, "seed"; d, collar and ligule.



IN 1928 Mr. R. McGillivray, then Fields Superintendent, Christchurch, found an unknown tussock grass, of rather handsome appearance, on a farm at Waipara. He and his officers made a somewhat detailed examination, and found the grass to be well established near Waipara township, with more isolated occurrences elsewhere in the county. Inquiries have failed to elicit definite evidence as to how the plant first came to be naturalised in the district, although various suggestions have been made. It seems certain that the first appearance was some forty years ago. Because of its similarity in growth-habit to native tussocks, especially hard tussock, its spread in the earlier years was probably more or less overlooked.

In 1934 specimens came into my hand, and the plant was identified as *Nassella trichotoma*. The small South American genus *Nassella* is closely related to the needle grasses (species of *Stipa*), and occurs in Peru, Chile, Uruguay and Argentine. Our species is a widespread and characteristic plant of the Argentine pampas country. Dr. L. R. Parodi, the distinguished agrostologist of Buenos Aires, informs me that in its native haunts the grass is not eaten by stock, except when nothing else is available. In the highly cultivated areas it is easily controlled, and is there now found only in waste places, such as along roadsides and railway lines. Because of its "tumble weed" habits it is known as the "flying straw" (*paja voladora*).

Species of *Nassella* have reached Tweedside and Montpellier in wool from South America, and it is possible that this was the method by which the grass reached New Zealand. *Stipa neesiana*, a related, harmful South American grass, has been noted near wool factories in Scotland, France, Italy and Germany, and has recently been observed near Auckland.

In the Waipara County the grass has become a very serious menace. At the request of the Omihi branch of the Farmers' Union, the Plant Research Bureau Committee