the rape crop illustrated the fat-hen was stunted, very pale green, and mottled yellow in the untreated area, but fully 6in. taller and healthy in the treated area.

## Soil Responses

It is possible now to survey the responses in relation to the soil types in the area. There have been 17 responses on Kauru silt loam, 10 on Claremont silt loam, 7 on Opuha silt loam, 4 on Timaru silt loam, 1 on Oamaru complex, and 1 on Lismore stony loam. In addition to this it is

Right—This remarkable result was obtained on a rape crop at Burnside, North Otago, on Kauru silt loam. The portion of the crop on the left was sown with reverted superphosphate to which 3oz. of sodium molybdate per acre was added. The strip on the right was sown with reverted superphosphate. The portion of the crop in the extreme right background was sprayed with 2oz. of sodium molybdate per acre. Measurements before the crop was fed indicated that there was an increase of 600 per cent. in green material from the use of molybdenum. Below—Close-up of the crop shows the type of symptoms which might be attributed to acute molybdenum deficiency. Plants on untreated strip (right) are stunted, much paler than plants on treated strip (left), and tend to be yellow and mottled. They are sickly and tend to be damaged by insects. The leaves are poorly formed and many are cup shaped and rolled inward around the margins. Their stems stand out and there is poor leaf formation around the bases of the stems.