especially adapted for low lying lands, where it may well find a place in permanent pasture mixtures.

Austrian Brome Grass (*Bromus inermis*) is an introduced perennial, hardy, and a heavy cropper, producing a good aftermath of excellent feeding quality. By reason of the richness of its composition and its luxuriant habit of growth, it is certainly one of the most valuable of the introduced grasses.

Orchard Grass (*Dactylis glomerata*). This is a grass which responds well to liberal treatment, giving large crops on rich soils and particularly suitable for shady pastures.

These must suffice as types or illustrations of our work in the examination of Canadian grasses—the complete series comprising nearly three hundred analyses. I would, however, refer to some general conclusions, drawn from this investigation, regarding the right period at which to cut for hay.

In analysing the same grass at different stages of growth, it was noticed that certain changes of composition take place as the plant approaches maturity; the percentages of water, ash and albuminoids and fat decrease, while the percentage of fibre and usually the nitrogen free extract increase. In the younger stages, the grass is more succulent and palatable, and our work also shows that it is during the earlier weeks of growth that the plant's nitrogen and mineral matter are taken from the soil—which point to the advisability of thoroughly preparing the seed bed by cultivation and fertilizing, and to the value of top dressings with nitrate of soda while the crop is still young.

Further, the data we obtained allow us to infer that a loss of much valuable and digestible food material occurs when a grass is allowed to thoroughly mature before it is cut for hay. Scientific evidence is all in favor of cutting at or shortly after the flowering period.

INDIAN CORN.

No account of the coarse or bulky fodder plants of Canada would be complete without some reference to the character of the Indian corn crop, one which ranks next in importance to