

grass, and certainly the one which above all others has made winter dairying possible and profitable.

Owing to the large yields obtained and its succulent and nutritious character, corn furnishes one of the best and certainly the cheapest of our bulky fodders. An immense amount of chemical work has been done in our laboratories to ascertain, (1) the requirements of this crop, (2) the relative value of certain varieties for feeding purposes, and (3) the best time for cutting, whether for the silo or for preservation in the dry condition. Our data on this subject are voluminous. I can now but refer to one or two of the more important conclusions.

Analyzing the principal varieties at five different stages of growth and ascertaining the weight of the crop per acre at the same periods, we learned that a variety coming to early maturity (known as the glazing condition) would at that stage afford nearly twice as much real cattle food per acre than if cut a month earlier. The more practical deductions from our chemical work may be summarized as follows :

1. That the ground should be well prepared and rich in available plant food constituents, and more especially in potash.
2. That such varieties should be planted as will in all probability come to maturity before danger from frost.
3. That corn should not be sown broadcast ; for vigorous growth and in order to come to maturity it requires plenty of room for both roots and leaves.
4. That cutting either for the silo or for drying in stock should be delayed (unless it is touched by early frost) until the corn reaches the glazing condition.

Other fodder crops, including clover, beans, rye, and roots of all kinds, have been carefully studied and their requirements and relative feeding values made known for the guidance of our farmers. Since the profits in farming to-day depend as much upon cheap production as upon good prices ; the value of the knowledge of cheap and efficient feeding materials is obvious.