

content of Everglades grasses is almost as high as that of leguminous forage grown in mineral soils the inability of legumes to survive as perennials in the Everglades is no great detriment.

Mineral analyses were made on a number of these legumes and, as may be seen in Table 4, they were higher than the grasses (Table 2) in calcium, iron and phosphorus. The grasses contained a higher percentage of silicon and magnesium.

TABLE 5.—ORGANIC COMPOSITION OF FORAGE FEEDS AND OF SUGARCANE MOLASSES PRODUCED IN THE EVERGLADES.

| Material                          | Percent Oven-dry Basis |           |       |      |        | Date of Cutting |
|-----------------------------------|------------------------|-----------|-------|------|--------|-----------------|
|                                   | Protein                | Crude Fat | Fiber | Ash  | N.F.E. |                 |
| Green corn, stalks and ears       | 17.31                  | 2.17      | 26.61 | 7.08 | 46.83  | 1-18-34         |
| Corn for silage hard dough stage  | 11.78                  | 2.06      | 26.99 | 7.39 | 51.78  | 6- 7-35         |
| Sugarcane silage                  | 6.91                   | 1.15      | 34.51 | 5.10 | 52.33  | 1-21-36         |
| Mangel beets                      | 7.23                   | 0.49      | 6.30  | 7.56 | 78.42  | 2- 7-33         |
| Sugarcane molasses* or blackstrap | 9.01                   | 0.00      | 0.00  | 7.20 | 63.99  | .....           |

\* On the basis of 80.2 percent dry matter.

Table 5 gives the organic composition of Everglades-grown corn and sugarcane forage feeds as well as mangel beets. As in the case of the legumes and grasses, the proteins of these are outstandingly high. The protein of blackstrap or sugarcane molasses from sugarcane grown on Everglades organic soils is also high, making the molasses that much more valuable for feed.

### INFLUENCE OF STAGE OF CUTTING

During the fall of 1934 and the winter of 1935 a number of grasses that appeared to be most promising for pastures were established in replicated plots each 1/400 acre in size. There were 6 plots of each grass divided into 3 pairs. The grass was cut on 1 pair of plots when in the young grass or pre-bloom stage; on a second pair when in the early hay or early bloom stage; and on the third when in the late hay or early seed stage. The second and third stages were used to determine the change in composition that results when pastures are not grazed sufficiently to keep the grass in the younger and more vegetative stage. Such a condition is liable to occur in Everglades pastures