

## A Note on the Fodder Quality of *Ragi* (*Eleusine coracana*) Straw

One of the essential attributes of a good fodder is its quality. The nutritional values of forage crops and grasses have been discussed in detail by Gazi (1962). The cereal crops viz., paddy, wheat and millets serve as grain cum fodder crops. Of these, millets supply good quality fodder. The straw analysis of paddy and *cholam* revealed that *cholam* straw is more nutritious in that it contains lesser quantity of crude fibre and more of protein.

*Ragi* occupies about 25 lakhs of hectares and produces about 50-60 lakh tonnes of straw annually. The nutritive and feeding values of the *ragi* straw of white and brown grained varieties are discussed below.

During the summer season of 1966, four high yielding white grain *ragi* types of hybrid origin were tested for their yield potentials with the standard brown variety of *ragi* Co. 7. Straw samples of these varieties were analysed for their nutritive value and the results are reported in the table below.

| Straw analysis*       |               |          |                       |                     |                    |
|-----------------------|---------------|----------|-----------------------|---------------------|--------------------|
| Variety               | Moisture<br>% | Ash<br>% | Crude<br>protein<br>% | Crude<br>fibre<br>% | Dry<br>matter<br>% |
| E. C. (W) 820 - white | 8.00          | 13.31    | 9.98                  | 21.85               | 92.00              |
| - do - 825 - do -     | 7.75          | 15.04    | 8.06                  | 21.47               | 92.25              |
| - do - 829 - do -     | 6.75          | 11.93    | 8.54                  | 22.25               | 93.25              |
| - do - 836 - do -     | 7.75          | 13.42    | 7.94                  | 24.22               | 92.25              |
| Average               | 7.31          | 13.43    | 8.64                  | 22.45               | 92.44              |
| Ragi Co. 7 Brown      | 7.25          | 14.42    | 7.56                  | 21.01               | 92.75              |

\*Estimation on even dry basis.

There is slight variation in nutritive values within the white grain varieties. The straw of white varieties are rich in crude protein than that of brown variety. The straw of both the types are almost equal in dry matter content and the white varieties are slightly higher in crude fibre content.

Simultaneously the straw samples of white and brown varieties were fed to a pair of work animals of medium age. The ration was fixed as twenty kilograms of straw per day per animal. Each animal was fed with the straw of these varieties separately and the rejection of the straw was noted on every morning of the next day. Regarding palatability there was no significant difference in the consumption of straws of white and brown varieties.

Comparison of the nutritive values of *ragi* straw with that of paddy and *cholam* straws shows that *ragi* straw is richer in ash, crude protein and dry matter and poorer in crude fibre. So the nutritional quality of *ragi* straw is better than that of paddy and *cholam*. In addition, the juicy and succulent nature of *ragi* straw adds to its palatability.

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