

rich in respect of fruit consumption. If the health value of fruits is brought home to them, we should be able to increase sales and extend our production of fruits to a remarkable extent. For the people even in the lowest economic group also, there is a large variety of fruits like the cashew apple, jack, ber, nelli or amla, papaya, custard apple, cheaper mango and citrus, which can be produced in plenty and placed within their reach. These oft-despised fruits of the rich are not merely healthful, but are also a source of no mean profit. In these days one often sees a poor man having a satisfying meal with four to five Mauritius bananas. It is doubtful if a more healthy meal can be had of cereals at the same cost.

Above all, let us not forget, that if health, growth and efficiency mean anything in our scheme of life, the value of fruit diet cannot be measured in terms of their actual cost. Fruits are certainly cheap from the stand-point of health value, and are essential for our well-being, which is Home Defence. The origin of the best food is fruit industry. The source of one of the national wealths is also the same. If we are indifferent to that industry, we only ignore the means of bringing about our economic prosperity and improvement of national health, especially in a province like ours which enjoys the most favourable conditions for fruit production at a cost which will defy competition. "Grow More Fruit" and 'Eat More Fruit' are the two slogans which should, therefore, motivate our actions in various spheres of national life.

Breeds of Cattle and Their Staple Fodder Grasses

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Introduction There are four important breeds of cattle in South India viz., the Amirthamahāhal and Hallikar in the Mysore State; the Ongole in the Guntur District and the Kangayam in the Coimbatore District. These four breeds are not the outcome of any scientific breeding as it is the case in Western countries, though in maintaining the purity of the breeds, some crude principles might have been observed by the ryots. These four breeds differ from one another in their characteristics—the Amirthamahāhal and Hallikar are known for their nimble foot on the road; the Ongole for its massive body and slowness in speed combined with immense capacity to haul heavy loads; the Kangayam for its medium size and long life especially when put to heavy agricultural work such as mhoting. In Western countries cattle breeders pay great attention not only to pedigree breeding but also to feeding and upbringing of cattle. Stall feeding plays an important role. The advantage in stall feeding is that the best forage can be supplied to the animal in required quantities and the deficiencies made up by suitable concentrates. Unfortunately, in this country, cattle feeding is still a neglected problem.

Breeds of cattle and grass species These four breeds, mainly depend upon the natural fodders, for their feed, chief of which are the grasses in

waste places, reserve forests and other pastures. A study of the grasses in these tracts reveals the fact that each tract has a characteristic grass species as pointed out below

Amirthamahal breed The predominating grass found at Hunsur and surrounding places in the Mysore State which is the home of the Amirthamahal breed of cattle is *Sehima nervosum* Stapf (Eng: Rat-tail grass; Tel: *Nendra guddi*; Tam: *Kurai yitti*; Kan: *Nalai hullu*; Mal: *Paal pullu*). By cattle graziers it is considered to be the best forest grass and is the mainstay of this breed of cattle which were famous as draught animals for military purposes at the time of Hyder Ali and Tippu Sultan. It thrives in hilly tracts with fairly good soil and under partial shade. It grows to three feet in height and tillers profusely. The great strength and vicious nature of the animals of this breed is attributed to their grazing on this species of grass.

Hallikar breed The commonest grass found in wet situations especially on rice-land bunds and odd uncultivated corners in rice-lands of the Mysore State is *Dichanthium caricosum* A. Camus (Kan: *Boadi hullu*, *Kanda baatha hullu*, *Pari hullu*, *Sanna hullu*; Tel: *Molava goddi*). Villagers of these places are privileged to take the bull calves and young bulls of this breed along the bunds of the rice fields for grazing, even when the crop is on. It grows to 1½ to 2 ft. in height and is very much relished by cattle and is the mainstay of the Hallikar breed of cattle found in Hassan, Tumkur and Mysore Districts of the State.

Ongole breed The two very important and allied species of grasses found in the Guntur and adjoining districts of the Madras Province are *Iseilema laxum* Hack. and *I. antheperoides* Hack. They are the mainstay of the Ongole breed of cattle. They thrive in black cotton soil and grow to 1½ to 2 ft. high with decumbent bases.

Kangoyam breed The commonest and the most important grass found in the south and south-east Taluks of the Coimbatore District is *Cenchrus ciliaris* L. (Tam: *Kolukattai pullu*). It is the mainstay of the Kangayam breed of cattle. This grass thrives in dry places in red soils. It grows to 1½ to 2 ft. in height, and is relished by cattle. Young shoots arise from the root-stocks immediately after showers. It is a hardy grass with a tendency to form 'legs' in fertile soils which should be cut down to the base before the monsoon sets in.

From the foregoing observations it is seen that these four breeds of cattle have in the natural pastures of their respective tracts four dominating species of grasses. It may be interesting to ascertain whether a similar relationship exists between the other breeds of cattle (about 24 in number) in India and the dominant grass of the locality in which the distinctive breeds flourish. The mineral and protein content of these grasses along with soil and climatic conditions of the places may be responsible for the different types of builds of these breeds of cattle.