

## A New Millet—*Brachiaria ramosa* Stapf

By K. CHERIAN JACOB, L. Ag. F. L. S.

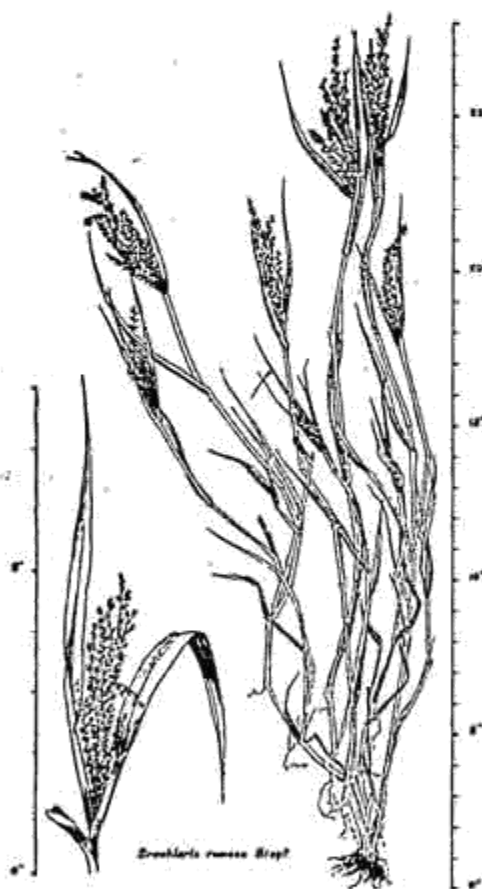
*Agricultural Research Institute, Coimbatore*

Some common grasses found in the Madras Province enumerated below are recorded to be under cultivation in parts of Northern India for grain which is used as human food. The more important among these are:— (1) *Echinochloa colona* Link. (*Panicum colonum* Linn.), Kan: *Godde votapagante hullu*; Tel: *Otha gaddi, Kaproda gaddi*; Tam: *Karum pul, Varsanum pullu*. It is cultivated in the Montgomery district of the Punjab and the grain is made into a paste, called 'bot', and eaten with milk. (2) *Echinochloa crus-galli* Beauv. (*Panicum Crus-galli* L.), Kan: *Kadu dabhai hullu*; Tel: *Pedda wundu*; Tam: *Oothu pul*. It is cultivated in parts of the Lahore district for its grain which is made into *Khir* and eaten. (3) *Urochloa reptans* Stapf (*Panicum prostratum* Lamk.), Kan: *Kovadaga hullu*; Tam: *Shani pullu, Muzinkam pul*. The grain is collected and used as food in times of scarcity. (4) *Paspalidium flavidum* A. Camus. (*Panicum flavidum* Retz.), Tel: *Uda gaddi*; Tam: *Arisi pul*. It is regularly grown in certain districts of the Bombay Province. The grain will keep many years without being attacked by insects. (5) *Setaria pallidifusca* Stapf et Hubb. (*Setaria glauca* Beauv.), Eng: Pigeon or Bottle grass; Kan: *Korane hullu*; Tel: *Nakka korra, Nariga, Koranike*; Tam: *Korali*. It is cultivated in some parts of the Nilgiris. In parts of the Central Provinces and Chota Nagpur the grain of the wild plant is collected, while in parts of the Bombay Province the grain of the cultivated variety is used as food.

*Brachiaria ramosa* Stapf (*Panicum ramosum* Linn.), Kan: *Bennai akki hullu, Kadu barogu hullu*; Tel: *Anda korra, Disakolu, Eduri gaddi*; Tam: *Pala pul, Kamban pul*; Mal: *Chama pothaval*. It is a grass found throughout the Madras Province which recently attracted the writer's attention as being grown in some parts of the province for its grain. It does not find mention in any standard publication as being cultivated anywhere for its grain even though it is an erect grass and more robust than some of the grain-yielding grasses enumerated above. This omission is probably due to its Telugu name *Anda korra* by virtue of which it is usually regarded as a variety of *korra* (*Setaria italica* Beauv.)—the Italian millet. Moreover, it is included in the revenue records under *korra*. It is, however, botanically very different from *korra* as the following description shows:—

**Description** It is an annual or often perennial grass commonly met with in cultivated lands. Stem 1–3 ft. high, erect or ascending from a shortly creeping base and rooting from the basal nodes, slender or rather stout, much branched from the base upwards, usually glabrous, leafy; nodes pubescent. Leaves 2–5 by  $\frac{1}{8}$ – $\frac{1}{2}$  in, linear-lanceolate, finely acuminate, thin, flat, smooth, glabrous or pubescent beneath, with scaberulous margin, base rounded; sheaths glabrous or pubescent, ciliate towards the mouth;

ligule a fringe of short hairs. Panicle 2—6 in. long, subpyramidal, with a long peduncle in the wild forms and short ones in the cultivated forms; rhachis angular; branches of panicle 5—6, distant in wild forms and very close in cultivated forms, 1—2 in. long, alternate, erect or spreading, shorter upwards; rhachis of racemes slender, angular, puberulous. Spikelets alternate,  $\frac{1}{10}$ — $\frac{1}{8}$  in. long, close or distant, often in pairs (a sessile and a pedicellate one), ovoid, acute, glabrous, turgid, pale green or yellowish; pedicels with a few long hairs near the tip. Glumes 4; lower involucral-glume half as long as the lower floral glume, ovate, acute, hyaline; upper involucral-glume about equalling the lower floral glume, ovate, acute, cuspidate, 5-nerved; lower floral glume similar but slightly broader, with membranous palea, empty; upper floral glume coriaceous, ovoid-oblong, acute, rugulose, with coriaceous palea.



The New Millet.

ready for harvest in three months. It is sown at any time between the latter half of August and the middle of October and is usually harvested before the end of December.

**Yield** This varies with the situation in which the crop is grown. In places with a fair and well-distributed rainfall, yields as high as 500 lb. are obtained but in drier situations the yield is about 300 lb. The average may be taken as 400 lb. per acre. The yield of straw is about 500 pounds per acre; it is relished by cattle.

The panicles in the cultivated forms are very much branched though in some of the wild forms they may consist of only three or four spikes. The spikelets in a spike are more numerous in the cultivated forms.

Specimens of this grass were received from the Agricultural Demonstrators, Vizagapatam and Madakasira, for identification. The following details were furnished by them.

**Area** About 8,000 acres in Madakasira taluk, Anantapur district, 2,000 acres in the Madhugiri taluk of the Tumkur District of the Mysore State and 5 acres at Nellure village near Vizagapatam town are known to be under this crop. Madhugiri and Madakasira are 2,000 feet above sea-level. The soil is a red loam.

**Season of cultivation** It is a crop of very short duration, being

**Preparation of grain** The grain is husked and the glumes are removed just as in the case of the Italian millet. The ratio of pounded grain to whole grain is 3:8 by volume and 40 per cent by weight. The husked grain is mixed with *ragi* (*Eleusine coracana* Gaertn.) flour and made into a pudding commonly known as *kali* in Tamil. Very rarely it is made into *rotties* (cakes). This grain is considered superior to *Panicum miliare* Lamk. (Tam. *samai*). Many *ryots* use this grain during certain months of the year.

**Acknowledgment** My thanks are due to Sri M. Vaidyanathan, Agricultural Demonstrator, Madakasira taluk, Anantapur district, for the information supplied by him.

#### References

- Cooke, T. (1908) *Flora of the Presidency of Bombay*, 932—33.  
 Fischer, C. E. C. (1934) *Flora of the Presidency of Madras*, Part 10.  
 George Watt. (1892) *Dictionary of the Economic Products of India*, 6, 7—14.  
 Jacob, K. Cherian (1939) *Madras Agricultural Journal*, 27, 9—18.  
 Jacob, K. Cherian (1942) *Madras Agricultural Journal*, 30, 179—91.

### Economic Entomologists and Scientific Names of Insects\*

By Dr. T. V. R. Ayyar, Ph. D.

It is not uncommon nowadays to find workers in the economic aspects of zoology, especially Economic Entomologists, finding themselves in very awkward situations when they attempt to call by scientific names some of those organisms with which they have to deal. While the field entomologist is quite sure of the identity and the various features and idiosyncrasies of the beetle, bug, grasshopper or moth he has been dealing with, perhaps for many years, the scientific appellations of those insects get frequently changed at the hands of our systematists. It has of course to be admitted that every one dealing with an insect, or for the matter of that, any organism, has necessarily to know the which particular creature it is that he is dealing with and its correct identity; but having assured himself of the latter by continuous touch with it for years, it becomes rather funny, if not annoying, to find that the name once given to a creature is in some cases frequently changed. Fernald was quite right when he said that "the work of dealing with the constantly changing scientific names is indeed a difficult problem". Most of us know that the names of some of our common insects have been changing from time to time from one to another and in some cases reverting to the same old name which were rejected some time back! Numerous examples could be pointed out of such nomenclatural acrobatics connected with insects. It is felt rather funny when we find the name of our old friend, the common fruit fly—'*Dacus*', changed to '*Chaetodacus*' and then again to find that in course of time he is '*Dacus*' again. The castor semilooper which was at first '*Achoea*' became '*Ophiusa*' and has again been labelled

\* Paper read at the Indian Science Congress, Baroda, 1942.