

The quality of milk itself is good giving average of 4.5% butter fat. For butter making, however, the flavour of butter is second to the Scindhi but in carotene content from visual observation the depth of colour is similar. From the point of keeping qualities, Gir butter kept the longest compared with Scindhi and Kangayam.

A small herd of Gir has been stationed at the Dt. Livestock Farm, Koila, South Kanara District where there is very high rainfall. Though they appear to be doing well under farm conditions, the bulls are too big for the local cows for extensive use of Gir bulls.

There have been a few calves born to Gir bulls distributed from Hosur Cattle Farm and there are private owned animals in areas bordering Bombay State. So far the progeny seem to indicate that there is great promise for upgrading the scrub cattle in the areas where the animals are medium sized and which are too small for Ongoles and too big for Scindhis.

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Agricultural folk lore in Malabar

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Introduction: Folk lore is the expression of accumulated experience in the form of songs, sayings and proverbs. It is current in many countries and in many languages. Often folk lore gives valuable information. Folk lore relating to weather and agricultural practices, obtaining in Malabar is full of interest, with wealth of details. The gist of information from a few selected sayings in the local language is given under different heads to show how they are of interest and guidance to the farmers.

Remarks

At Hosur
64.3% of Gir
herd remain-
ed in milk
throughout
1951-1952

is quite high.
ilk production

- Seeds:** 1. Use good pedigree seed and you get a bumper yield.
2. If you have seeds ready, you can cultivate at proper season.
3. The less the quantity of seed the more the number of ploughings required.
4. Yield can be forecasted from the vigour of germination.

- Cultivation:** 1. Close attention will improve both land and lass.
2. Ten ploughings for dry showings.
3. Labour charges will be twice the seed.
4. Though work is not equally turned out, the sunlight must be equally shared - meaning though the farmer is not working along with the labourers, atleast he must be with them supervising the work.

- Sowing and Planting:** 1. Early crop means golden crop.
2. If the seed is sown deep the granary will get filled up.
3. The earlier the seeds are sown the better filled will be the earheads.
4. Give a wider spacing for big bunches of seedlings (Paddy) during transplanting the first crop.

- Manuring:** 1. Owner's supervision means the best manure.
2. "Like manuring at the ear heads!"
3. Fish manure for vegetables and pit manure for paddy lands.

- Irrigation:** 1. Irrigate at the base and the sprouts will come at the top.
2. Frogs must jump under bitter gourd vines.

- Harvest and Yield:** 1. Ten days in shot blade, ten days in flower, ten days in milk and ten days for ripening (paddy).
2. The third year will take pepper to the grinding stone and the fourth year to the town.
3. The low lying lands will give heavy yields.
4. If you dry coconuts too much there will be more of oilcake; if you dry gingelly too much there will be more of oil.

- Pests and Diseases:** 1. If there are no rats, no pigs, no bandicoots and birds cultivation will be more paying.
2. If sowing is done in "Puyyam nattuvela" there will be insect trouble afterwards.

3. If there is heavy rain in 'Karthiga Nattuvela'* the seedlings succumb to insect pest specially army worm (*Spodoptera mauritia*) for paddy.

4. If there are long spells of bright weather in 'Makeeram' and 'Thiruvathera' nattuvelas, there will be attack by silver shoot (*Pachydiplosis oryzae*), and leaf beetles (*Hispa* and *Leptispa*) for paddy.

5. Strong winds during 'Moolam' and 'Pooradam' nattuvelas will reduce the incidence of Rice bug (*Leptacoris acuta*)

Cattle: 1. Farming without cattle and a girl without eyes are equally bad.

2. Small, short and smart are the qualities of the working animal.

3. If you pay silver for purchasing cattle you must pay gold, for getting a fellow to look after it.

4. Give a heavy plough for a falling bullock.

5. Lightning in the month of Karkkidekam (July) is bad for the working animal.

6. A white bullock which has give parts black is good at work (the give parts are eyes, muzzle, horns, hoofs and tuft of the tail).

7. Horns farther apart, hoof cleft close, dewlap small, sheath and scrotum not at all pendulous and tail short are the signs of a bullock which does not require a whip to drive him.

Rains and Crops: (a) *Paddy:* (i) Rains in the month of Kumbham, augurs well for the next crop.

(ii) Sowing in 'Bharani' nattuvela, by timely rains, ensures good yield of first crop.

(iii) Incessant rains in 'Thiruvathera' nattuvela will make even stones to strike roots.

(b) *Coconut:* Rains in the month of 'Thulam' (North East Monsoon) is most important for good bearing.

(c) *Pepper:* Failure of rains in 'Thiruvathera' nattuvela, will result in poor yields of crops, especially pepper. The rains during this period count a lot for proper setting of the berries.

*Nattuvela — The Agricultural year commences from the first of the Malayalam month 'Medam' (April 15th) and the whole year is divided into twenty seven periods of nearly two weeks each, called a 'Nattuvela'. These nattuvelas are named in sequence from the first star 'Aswathi' and so on of the Zodiac.

- (d) *Ginger*: (i) Plant ginger during the month of 'Edavom'.
 (ii) Rains during the month of 'Chingom' are essential for good yield.
- (e) *Gingelly*: (i) Seeds should be sown in the beginning of 'Makkeeram' nattuvela.
 (ii) Heavy rains in the months of 'Dhanu' and 'Makaram' work adversely.
- (f) *Horsegram*: (i) Rains in the month of 'Makaram' will spoil the crop.
 (ii) Three rains for horsegram.

General observations on weather: 1. The sun setting behind a cloud forebodes rain the next day.

2. Two full moons in a calendar month bring in a flood.

3. The rainfall in different nattuvelas is directly proportional to the velocity of wind on each star day of the month of 'Kumbam'.

4. Rain before seven Fine before eleven.

5. Rainbow after a long drought is the precursor of a decided change to wet weather.

6. Thunder rains accelerate the growth of mushroom.

Animals and plants as prophets: 1. If oxen turn up their nostrils and sniff in the air, if they lick their forefeet or lie on the right side, it will rain.

2. If bats cry much or fly into the house, it will rain.

3. If the rain birds cry, there will be rain on that day.

4. Cranes flying towards the source of a river indicate rain.

5. Fish swim upstream before rain.

6. If the snails and slugs come about abundantly, it is a sign of rain.

7. If ants are more than ordinarily active, or if they remove their eggs from small hills, it will surely rain.

8. Profuse flowering of the following plants is said to indicate high yields of certain crops as noted below:—

Ficus religiosa (peepal) — Prosperity for all plants.

Zizigium jambolana (Naval tree) — High yields of gingelly and black gram.

Bassia latifolia (Euluppai) — Good yields in wheat.

Pterocarpus marsupium (Vengai) — Mustard.

Pongamia glabra (Pungam) — Greengram.

Bamboosa indica (Bamboo) — An year of pestilence.

Conclusion: Agricultural folk lore can often guide the farmer in his agricultural operations. It offers wide field for the Meteorologists and Agronomists to scientifically interpret the 'Nattuvelas' in their relationship to cropping practice.

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Thoughts After the Tour

By

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Study tours and excursion trips are better than class room broadcasts. The emotional awareness to facts of reality enriches experience very much as a panorama of events on the silver screen. The students of the final year returning recently after the tour could feel with Wordsworth:

"To the solid ground of Nature trusts the mind
That builds for age."

To see places of importance is itself a great opportunity. Then again we learnt a lot as outgoing students of the Agricultural College, Coimbatore. The achievements in Agricultural Science at the Research Institute could be compared with that of the various Research Stations we visited. The insight and inspiration into the progress of research did make us feel proud of our achievements in the comity of nations.

Before this tour we were under the impression that weaning of calves is harmful to the proper growth and development of the young stock. But we were impressed by the results at the Military Dairy Farm at Hebbal and the Indian Dairy Institute at Bangalore. The progress achieved by hand feeding proper adjustment was quite marked. The only point of importance is the need to maintain scrupulous cleanliness all