

grown by itself, since the pest has no other host plant to turn its attention to. The latter case, too, presents a similar limitation with the reservation that the selection made should be such as would continue to show a low degree in the scale of infestation, when compared either with the existing alternative crops or wild hosts. Under these conditions the inherent characters of a plant may have to be examined subject to the limitations indicated. The time of flowering and the duration of a crop, on the other hand, are factors of a different character, since they seem to permit a certain amount of judicious handling so as to steer clear of periods of maximum damage. The factor of natural vigour in a plant, investing it with a capacity to withstand damage, would appear to hold out promise of a great future in regard to combating certain pests, and the characters that are associated with vigour, therefore, deserve critical study.

<https://doi.org/10.29321/MAJ.10.A05012>

G. E. B. 24 IN PALGHAT

By P. A. VENKATESWARAN, B.A., B.Sc. (AG.)

Agricultural Demonstrator, Palghat

'The which if you with patient ears attend,
What here shall miss, our toil shall strive to mend.'

General.—'What have Government to do with the actual processes of Agriculture?'—'How could these Government officers expect to help us?'—are questions still put by ryots to Agricultural officers. As often the questions have been asked, so often the answers have been given. Instances of the methods by which Agricultural officers have been hitherto able to assist ryots in different localities, have already been quoted and can still be multiplied. The object of this paper is to furnish one particular instance of how the department has helped the ryots with the strain of Paddy known as G. E. B. 24 in Palghat Taluk.

In Palghat Taluk, whose total area is about $4\frac{1}{2}$ lakhs of acres, paddy claims about 2 lakhs of acres. From this it is seen of what great importance paddy is to Palghat, which has been aptly described as the 'Granary of Malabar.' Of the two lakhs of acres under paddy, about 120,000 acres will be single crop and the rest double crop area. The main paddy varieties used in the first crop season are *Chemban* ($4\frac{1}{2}$ months), *Chornali* (5 months), *Tavalakannan* ($5\frac{1}{2}$ months) and *Arikiri* ($6\frac{1}{2}$ months). The important second crop varieties are *Chetteni* (5 months) and *Anakomban* (6 months). It is important to note that *Chetteni* alone occupies more than half the second crop area in Palghat, i.e., over 40,000 acres.

Excepting in some places favoured with *Aeries* or tanks, the second crop paddy cultivation in this Taluk seems to be a gamble with the North-East Monsoon. Anakomban, the 6-months variety, is cultivated under *Aeries* or tanks in preference to short-duration varieties because of the assured water-supply; but, *Chetteni* is grown in lands entirely at the mercy of the North-East Monsoon. It has been the common experience of the ryots that the North-East Monsoon, more often than not, fails to give enough rain to mature even a short-duration crop like *Chetteni*. The vagaries of this monsoon mean disaster to the second crop.

Cultivation aspect.—G. E. B. 24 is well adapted to the conditions obtaining in Palghat. The introduction of G. E. B. 24 and its spread in

Palghat is mainly due to the scarcity of water for *Chetteni*. G. E. B. 24 assures the ryot of a second crop where it used to fail. As a substitute for the precarious *Chetteni*, G. E. B. 24 does well. It is generally cultivated as a second crop in double crop lands, where it comes to harvest a month earlier than *Chetteni*.

Transplanted in June-July, it is harvested in the latter half of November. Transplanted in August-September, as a second crop, it is harvested in the latter half of December. Practically before the beginning of January the crop is off the field, however early or late it may be planted. The flowering of this crop takes place between the 15th of October and the 15th of November.

In addition to the most popular name *Kichili Samba* many local names, like *Sirkar Samba*, *Company Samba*, *Madurai Samba* and *Neyyi Samba*, have been given to G. E. B. 24. But,

'What's in a name? That which we call a rose
By any other name would smell as sweet.'

Since 1926, the year in which G. E. B. 24 was introduced for the first time in Palghat, the area under this strain has been rapidly increasing year after year, as the following statement would show :

Year	1926-27	1927-28	1928-29	1929-30	1930-31
Acreage ...	5	90	500	2,000	15,000

This year (1930-31) on account of the extensive area grown under this strain and the concentration of my activities to definite centres of work, it has not been possible for me to attempt a countrywide enquiry. However, I have every reason to believe from my actual observation and study that the total extent of G. E. B. 24 would be about 15,000 acres in 1930-31.

It is found that even Cherumas, the hardiest and ablest tillers of the soil, though the lowest and poorest class in the land, have taken to the cultivation of this strain earnestly. The following incident, which occurred in August 1930, serves to show convincingly how a Cheruma has come to appreciate the high value of G. E. B. 24.

When I was plodding my weary way from Olavakode Railway station to the Nayadi colony, I happened to notice a Cheruma, who was following me with a basket at a short distance behind, exhibiting its contents to some passers-by. Curious to know what the exhibit was, I stopped short and called for the man. I was told by this Cheruma cultivator, who belonged to the neighbouring village Agathethara, that he had in his basket two Paras of '— Samba' purchased for Rs. 2-12-0—at the rate of Re. 1-6-0 per Para (6½ M.M.)—indeed a high price for any paddy seed. I was surprised to find on examination that his '— Samba' was a poor sample of our G. E. B. 24. Remaining *incognito*, I put him questions, which brought out the information that, as he had seen the performance of this Samba, he decided to try this paddy, for which he did not grudge paying such a high price. Complimenting him, in the name of the Department, for his warm advocacy of this excellent strain of paddy to his brother tenants, I led the way to him.

Economic aspect.—As *Chetteni* is the principal crop which G. E. B. 24 in Palghat, under the existing conditions, replaces—although, in point of duration, *Chetteni* is not on a footing of equality with G. E. B. 24—the comparative study of G. E. B. 24 can be made with reference to *Chetteni*. For purposes of presenting the economic aspect of the cultivation of G. E. B. 24 in as simple a manner as possible, a rough and ready method of calculation is adopted here with fair success.

The average yield per acre of *Chetteni* in Palghat might be put down at 60 to 70 Paras of paddy worth Rs. 39 to Rs. 45 at the average normal price of Rs. 45 per cart-load of 70 Paras. The average yield per acre of G. E. B. 24 can be put as 70 to 80 Paras worth Rs. 60 to 69 at the average normal price of Rs. 60 per cart-load of 70 Paras. Thus, there is an increased profit of Rs. 21 to 24 per acre by growing G. E. B. 24 in place of *Chetteni*.

This year (1930–31) on account of the 'excesses' of the North-East Monsoon, G. E. B. 24 in common with *Chetteni* has not come up to expectations in some places. The prices have also fallen down in the case of *Chetteni* from Rs. 45 to Rs. 35 and in the case of G. E. B. 24 from Rs. 60 to Rs. 50 per cart-load. While *Chetteni* gave on an average 40 to 50 Paras per acre worth Rs. 20 to Rs. 25, G. E. B. 24 gave on an average 50 to 60 Paras per acre worth Rs. 36 to Rs. 43. There is still a margin of Rs. 16 to Rs. 18 per acre in favour of G. E. B. 24.

On the whole, therefore, G. E. B. 24 can be expected to give an average increased profit of anything from Rs. 16 to Rs. 24 per acre.

But, mention has, however, to be made here of the fact that the straw yields of both *Chetteni* and G. E. B. 24 have not been taken into consideration. It is admitted that G. E. B. 24 yields less straw than *Chetteni*. Taking all these circumstances into consideration—to be on the safe side—I would put a smaller sum, say Rs. 10, as the average increased profit accruing from the cultivation of an acre of G. E. B. 24; because in Shakespeare's words,

'The ample proposition that hope makes
'In all designs begun on earth below
'Fails in the promis'd largeness: checks and disasters
'Grow in the veins of actions highest rear'd,
'As knots, by the conflux of meeting sap,
'Infect the sound pine and diverts his grain
'Tortive and errant from his course of growth.'

Conclusion.—The conclusion is that 15,000 acres of G. E. B. 24, yielding an extra profit of Rs. 10 per acre, put Rs. 1,50,000—a no small amount—into the pockets of the ryots. But, the potential area where this strain can replace *Chetteni* is, as previously stated, over 40,000 acres and the potential extra gain in the event of the whole of this area being cropped with G. E. B. 24 will be the huge total of four lakhs of rupees. G. E. B. 24 has done much and promises to do more. G. E. B. 24 has given satisfaction to one and all from the high caste Brahmin to the low caste Cheruma. Long ago, G. E. B. 24 became the trump card in my propaganda; now, G. E. B. 24 serves me as a passport for entering even *Purdah* farmsteads. As far as Palghat taluk is concerned, I can unhesitatingly say that G. E. B. 24 has enhanced, more than anything else, the prestige of the Department and made it widely known to the cultivators.