been achieved by horticulturists in Kurnool District (Panyam) where a *Citrus* × *Feronia* combination was tried with success in 1924.

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https://doi.org/10.29321/MAJ.10.A01486

ECONOMICS OF GRAPEVINE CULTIVATION

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The cultivation of grapevine was introduced in Tamil country forty years ago. Rev. Larney was the first to introduce it in Panjampatti village in the Madura district. The cultivation of vine gradually spread from one village to another and now nearly eighty acres are under this crop in several villages in Madura and Trichy districts. The cultivation aspect of it has already been dealt with in an article published in the Madras Agricultural Students' Union Journal, Vol. XI. 1923.

About three hundred vines are planted to an acre. Each garden on an average consists of fifteen to twenty vines and seldom can a cultivator pay attention to more than fifty vines. The vines begin to yield only two years after planting and the following statement gives a record of income and expenditure for the first three years after planting.

Details

1 YEAR:

Preparatory cultivation (i.e.) ploughing

	Rs	A	P
Levelling, and digging of pits	80	0	0
Erecting pandal	280	0	0
Manuring (leafmould)	130	0	0
After cultivation			
Manuring, cattle manure at 70 cartloads. per acre ...	70	0	0
Weeding	30	0	0
Irrigation	270	0	0
Total ...	860	0	0

2 YEAR :

	Rs	A	P
Renewing old and unserviceable parts	90	0	0
Manuring, weeding, and irrigation	370	0	0
Pruning	40	0	0
Spraying (four times)	100	0	0
Harvesting and carrying charges	130	0	0
	730	0	0

Average yield per vine 2 mds. at 4 Rs. per md.

Do do Acre (300 vines yielding 600 mds.) ...	2,400	0	0
Expenses for first and second year	~~1,800~~ 1590	~~0~~	~~0~~ 0
Gain per acre at the end of the 2nd Year ...	810	0	0

3 YEAR :

Expenses for the third year	730	0	0
Cost of produce per acre	2,400	0	0
Total expense	730	0	0
Gain per acre at the end of the third year	1,670	0	0

Marketing.—The chief markets for the produce are (1) chief towns of the southern parts of the Presidency (i.e.) Tinnevelly, Madura, Tanjore etc. (2) Colombo. Trade with the latter market is carried on only in June and July when Australian grapes are scarce. The cultivator sells his produce locally to an agent of recognised fruit-sellers in the towns named above. Occasionally the services of the local agent are not utilised and the cultivator himself directly deals with the merchants.

Packing.—Until recently fruits used to be packed in bamboo baskets. An innovation has been introduced which is gaining much favour amongst sellers. This consists in utilising earthen pots with holes bored to admit air. This is reported also to minimise damage.

Disease :—Grapevine is subject to a very serious fungoid disease, namely, mildew, causing the leaves and fruits to shrivel and fall down. Fortunately the disease can easily be checked by spraying with Bordeaux mixture. The cultivators of Maichaelpatti and Panjampatti suffered heavy loss due to this disease prior to the year 1920, when they did not know the efficacy of Bordeaux mixture. In 1920, however, the Mycology section of the Agricultural Department came to their rescue, and gave them a cheap and effective remedy to combat the disease. Since then, they have by systematic spraying, very effectively prevented the appearance of the disease. Most of the cultivators own sprayers and know how to prepare Bordeaux mixture.

Anthracnose or birds eye disease.—Is yet another disease, which has made its appearance within two years. Experiments have been in progress to find a suitable remedy, as Bordeaux mixture is not very effective. Limesulphur is found to be effective. Another patent fungicide 'Solbar' is being tried to combat the disease.