

Reference No.: 41KN27A2984
Innovation: 'NP77' – An improved black pepper variety
Category: Agriculture/ Plant breeding/ New variety
Name of the innovator: Shri R G Hegade
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The Innovation:

Earlier the farmer breeder was cultivating the local varieties of pepper that are available in the market. He had observed that some of the farmers from his region used to go and bring seeds from Kerala as well. The yield of these local varieties that were under cultivation was very less, while, expenditure incurred on their cultivation and management was much higher resulting in drastic erosion of profit. Shri R. G. Hegade had a prior knowledge and had observed that the wild pepper types had comparatively bigger size fruits. Based on this background information and his experience with cultivating various types of local varieties, the farmer thought of developing a new variety that is a blend of the wild pepper and *Karimalligesara* (also known as Kala-Jasmine), a black pepper variety cultivated in the region.

Procedure adopted to develop variety:

Shri Hegade selected some hardy wild pepper plants with bold seed size and then used it in developing a new plant type by grafting it with *Karimalligesara* pepper variety. The plants produced through grafting showed resistant to pests and diseases outbreak and also yielded 30% more dry seed weight as compared to ordinary varieties or locally popular varieties.

It took four years for the development of the new plant type (variety). The seeds of grafted and selected plants were bold and dark black in colour with high pungency. The plants showed resistance against quick wilt and root rot in the next generation. These plants were reported to flower in June and fruiting occurs in the month of August. The fruits from the plants get matured by the month of April-May.

Features of the new variety

Quantitative characters

1. High and early yielding approx. 30 % higher yield than the locally popular varieties in the region.
2. Higher dry pepper weight (5 - 6 kg) as compared to commercially cultivated varieties (3 - 4 kg).

Qualitative characters

3. Resistant to quick wilt and root rot
4. Dark black in colour and thus has good market as compared to dark brown pepper

Stability and diffusion status:

The farmer is using this variety developed by him for the past four years and the performance of the variety has been reported to be stable over years. Currently, he has supplied the material to twenty farmers in his region and all of them are also cultivating the variety.

Recognition & awards:

Dharwad Krishi Vishwa Vidhyalaya has appreciated the efforts of Shri R.G. Hegade for conservation of old land races and development of variety.

Background:

Mr. Hegade is graduate and sixty-one year-old. His main occupation is agriculture.

Comparison of farmers developed variety to commercially cultivated variety

Character	Innovators variety 'NP 77'	Mr. K. T. Vargese 'Kampukkal'	Mr. Abraham Mathew 'Kadukumakkal'	Most popular variety of the region - Panniyur
Sowing distance (cm)	8 feet	8	10	6 feet spacing
Days to 50- per cent flowering	One year	One year	Two years	Two years
Days to fruit development from flowering	8 months	8	8	8 months
Spikes	6	5-6	5-6	4
Number of berries /spike	100-120	200	100-120	70-90
Dry pepper yield per plant	4- 5 Kg	4-6	3 – 3.5	2-3
Disease resistance/Control (%)	Resistant to Quick wilt & foot rot	Resistant to Quick wilt & foot rot	Resistant to Quick wilt & foot rot	Susceptible to Quick wilt & foot rot
Drought resistance/flood tolerance	Drought resistant	-	-	-

