

Maintenance of Mature Pepper Vines for Optimum Productivity

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In the fifth article on pepper, we were looking at the maintenance and care of young or immature pepper vines. In this article, we look at cultural practices for the maintenance and care of mature pepper vines. The management of pests and diseases of pepper will be covered in later articles.

Fertilising

For mature vines, compound fertiliser of formulation 12:12:17:2+TE or 14:14:21:2+TE (Nitrogen:Phosphorus:Potassium:Magnesium+Trace Elements) is applied in two narrow bands just below the outer canopy of the vine. The fertiliser is placed in a shallow trench and then covered over with a thin layer of soil. Care must be exercised in preparing the trench for fertiliser placement so as to minimise damage to feeder roots of the vines. This is done by racking in the direction of the feeder roots. The frequency and rate of fertiliser application is as follows:

Months after planting	Fertiliser	Quantity per vine per year
July	Dolomite	500g
August	Dried chicken dung or pelleted chicken manure	1-2 kg / 500g
September	12:12:17:2 + TE or 14:14:21:2 + TE	500g
October	12:12:17:2 + TE or 14:14:21:2 + TE	500g
November	12:12:17:2 + TE or 14:14:21:2 + TE	250g
December	12:12:17:2 + TE or 14:14:21:2 + TE	250g



Fertilizing pepper vine

Dolomite should be given as a separate application once a year, according to the schedule. It is broadcasted on the mound and forked in lightly. Chicken manure is normally applied once a year. Good quality dried chicken dung must be used. Chicken dung obtained from sources where saw dust is mixed with it is not recommended.

Weed Control and Managing the Ground Cover

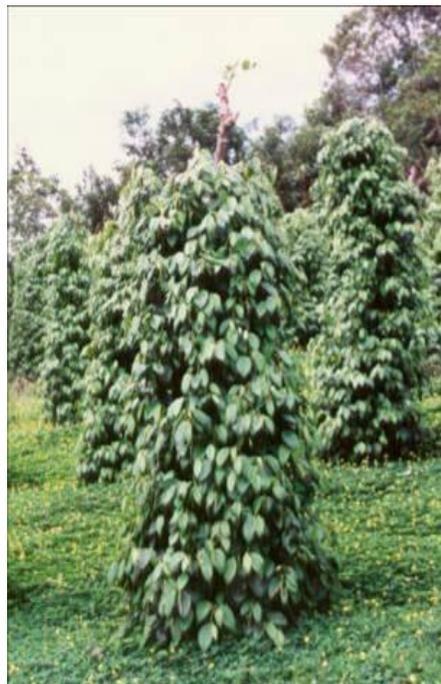
Circle weeding around the pepper vines needs to be done so that the cover crop does not compete to any great extent with the vines at any stage. This can be done manually or using contact herbicides but in the case of the latter, care must be taken to prevent drift from affecting the lower canopy of the vines.

Mounding

Mounding is beneficial to the vines because under tropical conditions, erosion of mound can be quite drastic. This is particularly so for vines planted on hill slopes and clean weeding with no cover crop is practised. Fresh soil should be added to the mound annually to make up for losses caused by surface run-off and to provide a fresh medium for root extension. For pepper vines grown with cover crop in the interrows, soil erosion is much reduced. Remounding with fresh soil could be carried out once in three or four years.

Shade tree management

The height of the living support is kept at 2.6 m or about 60 cm higher than the height of the mature pepper vine. The crown of the supports should be pruned every 2-3 months. A long range pruner is recommended for pruning. A worker can prune 300-400 support trees per day. All pruned materials are placed on the mounds for recycling of nutrients.



Height of support kept at 2.6m



Pruned materials put on pepper mound



Use of long range pruner to prune living support



A well-maintained pepper garden with vines trained on living support and cover crop in the interrows



A well-maintained pepper garden with vines trained on belian support and clean weeding is practised