CROP GUIDE - Vegetable

Sampling Notes

KB Item: 3504v4

The nutritional status of this vegetable crop is monitored using soil tests and plant analysis. Monitoring regularly is important to help sustain optimum levels and avoid nutritional disorders. If disorders do occur, rapid diagnosis is necessary to assist correction.

This Guide is very general and covers the different growing media commonly used for vegetable production. Refer to the specific Crop Guide for the Vegetable Species being grown for leaf test information.

Media

Sampling Time:	During the growing season.
Plant Part	2 - 20 cm.
Collect From:	The root zone of the plants.
Quantity per Sample:	0.5 - 1 litre.
Recommended Tests:	Basic Media (BM).
Comments:	Samples are usually taken during the growing season. Remove the top 2 cm of media from the surface, as this often contains a build up of soluble salts as a consequence of surface evaporation of the media solution. Pumice, which can be regarded as a totally inert media, can be handled in an alternative manner. The sample can be extracted as for the standard media test, but the resulting extract is then analysed as a nutrient solution.

Soil

Sampling Time:	Either prior to crop establishment or during the growing season.
Core Depth	15cm.
Collect From:	Randomly throughout the area to be planted.
Quantity per Sample:	12 - 20 cores.
Recommended Tests:	Basic Soil (BS), Sulphur profile (S), Available Nitrogen (AN)
Comments:	If a problem is suspected during the growing season, then a sample should be taken from the rooting zone immediately adjacent to the plant. Collecting a second sample from an unaffected area may help identify the cause of the problem.

Comments

The optimum level of nutrients and soluble salts will differ depending on the crop under consideration. For crops that tolerate higher levels of salts (e.g. tomatoes), the conductivity can be maintained at higher levels. For salt sensitive crops (e.g. cucumber, capsicum), the conductivity should be maintained at the lower end of the range. Crop-specific nutrient histogram ranges are shown on tests reports if the crop type is shown on the analysis request form submitted with samples.

References

Blackmore, L.C; Searle, P.L and Daly, B.K. 1987. Methods for chemical analysis of soils. NZ Soil Bureau Scientific Report 80. NZ Soil Bureau, DSIR.

Prasad, M. Pers. Comm.

Cooper, A. 1979. The ABC of NFT. Grower Books, London.

Disclaimer

Normal Range levels shown as histograms in test reports relate specifically to the sampling procedure provided in this crop guide. The Normal Range levels in test reports and Comments provided in this Crop Guide are the most up to date available, but may be altered without notification. Such alterations are implemented immediately in the laboratory histogram reports. It is recommended that a consultant or crop specialist be involved with interpretations and recommendations.