

Introduction

There are no soils that have everything in correct amounts. The following is needed for typical Waikato soils of most types, and for most of New Zealand's soils.

After correct drainage, adequate lime is the next essential. See Elements > Calcium. Fertilisers should be applied after lime has been washed in for a month or more.

I get our fertiliser and lime mixes mixed by Rorisons Mineral Development Ltd, Box 413960, Aerodrome Rd, Mt Maunganui. Ph 075-756-210. Fax 07-575-6511.

Rorisons Sales <sales@rorisons.co.nz>They plan to make it available for retail in the future.

Fertiliser Nutrient Planner and Lime Nutrient Planner spreadsheets are used to make up the order.

Always do trials by applying some of each mix to a small area (1 m²) at lower and higher rates.

Be aware of excesses in your area such as too much magnesium near Thames and Whakatane, and Wisconsin. Government and private consultants in your areas should know about excesses and deficiencies. A leaf analysis costs about NZ\$120. Soil analyses are rough and far from accurate. See Analysing Tissue Vs Soils in Pastures.

The following are alkali mixes, so should not be applied anywhere near acid loving plants, such as camellias, azaleas, rhododendrons and hydrangeas that you want to be blue as the blue colour is caused by acid fertilisers.

Optimum percentages of elementals for most conditions

VJ Garden LimeMag mix of 9 minerals at 3 to 5 kg per 10 m² dug in. See below.

N	P	K	S	Mg	CaCO ₃	B	Co	Cu	Se	Zn	Na
0	0	0	2	24	85	0.03	0.05	0.14	0.003	0.35	0.14

Farmers using pasture tissue analyses and the spreadsheets Pasture Mineral Analysis, Lime Nutrient Planner and Fertiliser Nutrient Planner, then applying correct mixes, get improvements in soils, pastures, crops and animal health. So, if applied to your vegetable garden, you should become healthier!?

To reduce weeds and moss, lawns can benefit from a LimeMag mix at 3 to 5 kg per 10 m² depending on how weedy and sour the soil is. Apply extra LimeMag on moss areas. The magnesium is the serpentine.

Apply this about every three years at about 3 kg per 10 m².

VJ Garden Fertiliser Mix of 12 elemental minerals at 1 kg per 10 m² dug in. See below.

N	P*	K	S	Mg	CaCO ₃ *	B	Co	Cu	Se	Zn	Na
2	9	3	4	24	19	0.22	0.02	0.05	0.003	0.21	0.13

* P and Ca are in Asura or better reactive phosphate, an organic approved reactive phosphate fertiliser.

This is a balanced fertiliser, not a high nitrogen fertiliser, but a general one made for gardens and lawns once or twice a year. Extra N can be applied with or separately as required.

Legumes, brassicas, maize, broad beans and tomatoes need deep cultivation and ample fertiliser and calcium dug in to about 400 mm. Leaf tips on some plants (broad beans and tomatoes in particular) become shrivelled, stunted and/or wilted. Tomatoes lacking Ca will also suffer Blossom End Rot that shows as a brown patch at the bottom of the fruit and/or black spots. Excessive N increases the chances of these occurring.

VJ Garden Fertiliser application rates are -

Vegetables

1 kg per 10 m² (3.3 by 3.3 metres) mixed well into the soil to the expected depth of the roots. Plants such as Tasty Tom tomatoes that yield 400 over four months (See www.gardeners-tips.com > Garden to get 400 tomatoes from one Tasty Tom Extra plant) should have more of this fertiliser applied in January and raked in to 3 cm.

Citrus

1 kg per 10 m² (3.3 by 3.3 metres) twice a year. If leaves go completely yellow apply 1 kg per 10 m² of Ammo (30 N and 14 S). It is half Urea and half of Sulphate of Ammonia. If leaves go yellow with green ribs apply more serpentine or magnesium (Mg). See Fertiliser Nutrient Planner for quantities.

Mg deficiency can cause yellow stripes in leaves from the base of the plant upwards, with some of the lower leaves dying completely, which is the opposite to iron deficiency. See Elements > Magnesium and Gardens Citrus.

Runner beans

Their roots go down half a metre if the top soil is deep enough, so dig compost and the lime mix at about 3 kg per 10 m² in deeply, then just before sowing fertiliser (separately) at 0.5 kg.

Lawns

0.5 kg per 10 m² twice a year. See www.gardeners-tips.com > Lawns.

After that, if the lawn starts to go yellow apply 1 kg per 100 m² (10 by 10 metres) of Ammo (half urea and half sulphate of ammonia) available from RD 1, Farmlands or Wrightsons. Apply more to yellow areas and less to green areas to try to keep the lawn an even green.

Yellow stripes on ryegrass that don't respond to nitrogen may need magnesium in the form of Serpentine (magnesium silicate and trace elements - the best by far), or Magnesium oxide or Sulphate. Too much sulphate will leach and take some other elements with it.