

## 12. Iron

There is no evidence that iron deficiency or toxicity occurs in grazing livestock in Victoria. In animals, heavy burdens of some internal parasites can lead to an anaemia similar to that caused by inadequate iron intake. High iron concentrations (up to 6000 mg/kg DM) in experimental diets have been shown to interfere with the copper metabolism of sheep and cattle (Grace 1983).

Iron deficiency has been well documented in horticultural crops in Victoria, but there is only one reported deficiency occurring in pastures—at Port Fairy in 1964 (North-Coombes 1982).

A sign of severe iron deficiency in plants is marked chlorosis. In marginal deficiencies, an interveinal chlorosis is apparent (Stiles 1961). Iron deficiency in plants usually occurs on calcareous soils, or soils which have been heavily limed.

Iron analysis of plant material can be conducted by the State Chemistry Laboratory. No critical concentrations for iron in Victorian pastures have been established.

### *References*

- Grace, N.D. (1983) The mineral requirements of grazing ruminants. New Zealand Society of Animal Production, Occasional Publication No. 9.
- North-Coombes, P. (1982) Iron investigations at Port Fairy, Victoria (1964-1966). In "Trace Element Review papers, 1982". Agricultural Services Library, Department of Agriculture, Victoria.
- Stiles, W. (1961) "Trace elements in plants". Cambridge Press.