Managing Pastures - Readers’ Note

This document is part of a larger publication. The remaining parts and full version of the publication can be found at:


Updated versions of this document can also be found at the above web address.

This document is subject to the disclaimers and copyright of the full version from which it is extracted. These disclaimers and copyright statements are available in the appropriate document at the above web address.
Grazing management—white clover

If white clover is the sole pasture species, the general recommendation is to graze it hard and infrequently. Graze when the oldest, lowest leaves in the canopy are starting to turn yellow. This could vary from 50 days in winter to 18 days in spring.

White clover ‘breaks up’ in summer. That is, the stolons (see Figure 9) break between the nodes and form new plants, which initiate roots from the nodes. The roots of these plantlets are much shallower than the taproot of the parent plant, and this makes the plants vulnerable to stress at this time and probably into the second year\(^2\). We are still not certain of the best way to graze white clover in summer to improve its survival.

Ryegrass – white clover

White clover is more sensitive to low temperatures than ryegrass. As a result, growth in winter is slower, and thus plants are easily shaded by the more rapidly growing ryegrass. With its wide leaves, annual ryegrass is particularly quick to shade clover. Sow annual ryegrass at less than 10kg/ha to retain a worthwhile clover component in the pasture.

Within limits, the grazing intervals most appropriate for ryegrass also suit large-leaved white clover varieties such as Haifa, Osceolo and El Lucero.

Kikuyu – white clover

The incorporation of white clover into a kikuyu pasture in autumn by judicious management can be very productive. The pasture is more sustainable than ryegrass, there is less need for N fertiliser, and the pasture quality is excellent. Yields of more than 15tDM/ha/year (9 of white clover and 7 of kikuyu) can be achieved. However, the clover does not persist after the third year; the problem appears to be a severe build-up of root-knot nematodes. The system is not recommended until we can either select resistant varieties (not yet commercially available), or find a management practice that minimises the effect of nematodes. It should be tried only if adequate irrigation is available.
Figure 9. The growing point of the white clover plant is at its tip. The oldest leaves, furthest from the growing point, die if they are not grazed. The plant relies on carbohydrate reserves in its stolons to recover after grazing.