

'KENT' OUTSHINES COMMON WHITE CLOVER

Although white clover in a lawn can be slippery, stain clothes and is unsightly to some, many prefer it to a grass monoculture.

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Landscapers are often surprised to discover the advantages of having white clover present in a lawn. Many are delighted to find that white clover offers a biological production of a slow release nitrogen fertilizer (clover seed should be inoculated), has deeper roots than many lawn grasses—implying some drought tolerance—and that it thick-

ens sod. Also, some grass pests do not damage white clover, and ecosystem diversity more often than not decreases pest epidemics.

We found a grass and legume cover crop mixture to contain fewer weeds than either the grass or the legume grown as a monoculture. In England a white clover cover crop "successfully dominated" annual bluegrass and

chickweed (*Cerastium* sp.).

"Kent" white clover is considerably shorter than common white clover. The latter is sometimes referred to as "Dutch," but this term is scientifically and legally meaningless. However, as long as the myth of "Dutch" white clover is perpetuated, the lawn industry and lawn owners are likely to perceive white clover as a weed.

Common white clover may be any of the three types of white clover (small, intermediate, or large) but is usually intermediate. We suspect that much of the problem with white clover in lawns is due to the height, leaflet and stolon size, abundance of flowers, and lack of persistence of common white clover.

Benefits of 'Kent'

Kent is not only shorter than common white clover, it also has smaller leaflets and stolons, and flowers less profusely and over a shorter period of time. There are also reports and observations of Kent, or the small white clover type in general, persisting longer, being more resistant to molluscs and mites and requiring less water.

We recently have observed consid-

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erably fewer Japanese beetles and leafminers on Kent than on common white clover. These results are of interest because of the problem of Japanese beetle larvae in lawns and adults on landscape plants. Leafminers can harm forage legumes.

In an adequately fertilized and mowed lawn, there should be little problem with heaving, competition for light, water, phosphorus or potassium. These are critical to the estab-



Not just a weed? Kent may challenge your opinion of white clover.

ishment and maintenance of white clover, as identified by those working with white clover for pasture and as a living mulch for row crops. However, a reduction in nitrogen fertilizer after the lawn is established may be economical, ecological and beneficial to the persistence of white clover. Abundant potassium and moderate phosphorus and lime will also favor clover and disfavor some weeds.

The remaining barrier to increased use of Kent is the inconvenience of obtaining seed and its higher price compared to common white clover. Seed of certified Kent white clover can be obtained by simply writing to Goldsmith Seeds, Bury St. Edmunds, England, where you can receive price information as well. Whatever amount you send Goldsmith Seeds, the company will send you as much seed as that amount will buy, less enough for surface mail, which takes two to three weeks.

Considering cost

If seed cost is the only factor in deciding whether to use Kent or common white clover, the size of the area to be seeded would be the primary consideration. However, it would seem

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"penny wise and pound foolish" not to spend an additional 10 cents or so per 1,000 square feet for a nicer lawn. Landscapers may distinguish themselves as unique within a certain geographical area in offering this certified clover and charge accordingly.

The purity of the Kent white clover seed lot we used, according to Goldsmith Seeds, was 99.1 percent and total germination 94 percent (hard seed eventually germinates and may actually be insurance if the seeds that quickly germinate fail to establish). Thus pure live seed was $(.991) \times (.94)$ or 93 percent. Our most recently used common white clover seed, which was labelled "extra fancy" and intended for use in lawns, was 90 percent pure live seed. Combining the extra 16 percent seed due to Kent's small seed size and the 3 percent extra pure live seed, one might use 19 percent less weight of Kent, reducing the expense to about 81 percent of the

originally estimated cost. Of course seed viability and purity can vary from year to year and source to source.

Further research and development is needed to determine if and in which climates the potential advantages of Kent white clover in lawns exist. We note that some large, rather attractive lawns on the grounds of this university contain a considerable amount of small white clover. Perhaps this clover was chosen because these sites have undergone years of frequent mowing at a low stubble height, similar to the 10 or more years of pasturing necessary prior to certification of Kent as a wild white clover.

It seems likely that many of today's lawn owners, after reading about pesticides, nitrate and groundwater contamination, will be willing to accept clover in a lawn. If so, Kent seems worth the extra cost, at least for smaller lawns or on a trial basis. **LM**

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