## **Executive Summary**

## Report from Dr W Rumball DSIR, New Zealand

The 1991 year has been spent making final selections in the *Agrostis Capillaris* breeding project, following notice that the funding would cease after 1992. The selected plants were interpollinated during the summer of 1991-2 (Southern Hemisphere) and the seed harvested will be sent to Dr Bridget Ruemmele for evaluation in the USA. Some of the seed will be held in New Zealand for a final progeny test, and for further seed increase. This second seed harvest will be used for sward evaluation in both USA and New Zealand, starting 1993.

The small-plot progeny trial kindly accommodated by Prof. Reed Funk, at Rutgers University, duly provided agronomic data used in the selection of parent plants for interpollination. I took the initiative of sending seed there in 1989, to give some local reality to the selection criteria. I am very pleased that Reed is interested in holding these plots for several years, to 'sort-out'. Dr Ruemmele is of course most welcome to make full use of any useful data or plant material, and I would hope we could develop an increasing exchange of data and material.

With the sending of the 'selection' to Dr Ruemmele for evaluation, I think New Zealand has carried out its side of the contract. As I have stressed to Jim Snow and others, we have kept fairly rigidly to the selection criteria laid down by the USGA - tolerance to low inputs such as fertiliser, irrigation and sprays. We have made little concession to superficial characters such as the current American concept of a desirable colour; nor to the widespread practice of increasing inputs as necessary to maintain perfect sward surfaces.

The Selection (Br 1518) of *A. castellana* being currently evaluated in the USA is basically a bonus to the main project. There should be no expectation that Br 1518 - or indeed any other selection of *A castellana* - would ever approach the best cultivars of either *A. capillaris* or *A. stolonifera* in performance. The species is simply not good enough nor ever will be. Br 1518 (now called 'Grasslands Milford') has been made available for two very precise niches:

- 1) to compete with 'Highland Bent' (also A. castellana) in the 'cheap seed' market.
- 2) to blend with dark cultivars of A. capillaris.

In this blend, Milford simply extends the versatility of the Colonial bent, adding improved performance in dry sites and dry seasons; and better cool-season colour.

My final comment is that this contract project with the USGA has been a great challenge and joy to us. I would welcome any further opportunities to do similar work.