Sir,

I can appreciate Ian Barton's reaction to what seems to him to be an over-zealous imposition of statistics on his paper. However, he overstates his case. He implies that "statistics" is synonymous with "statistical tests". In fact, the latter comprise a set of methods which are sometimes useful in examining the numbers and for indicating how much reliance may be placed on them. We live in a complex world in which the results of our investigations are rarely simple and clearcut: the best we can do is assess how much confidence may be placed in the differences we measure. Naturally, the methods we use should be applied in appropriate circumstances, and with due caution. The use of statistical methods has increased dramatically with the much wider availability of computers and statistical software. Understanding of the applicability and limitations of the methods has often not kept pace with their use. This observation is illustrated by Ian Barton's use of "statistical proof": none of the papers in the *New Zealand Journal of Forestry Science* has ever relied on statistical proof, because statistical methods cannot prove anything! They provide evidence only, the value of which must be judged by the user and his readers.

Graham Will may have been lucky with his diagnosis of boron deficiency and I trust there have been further surveys and experiments to determine optimal rates of treatment in various circumstances. Simple yes/no experiments are appropriate as pilot-studies only. Experimentation should only be as simple as reality permits.

One of the great benefits of computers is in allowing us to move away from the constraint of using a very few conventional levels of statistical significance: 5%, 1%, and 0.1%, represented by *, **, and *** respectively. Wherever possible I have done my humble best to encourage the use of estimated significance values; for example 4.9%, 5.1%, 23.8%, or whatever. These are easily calculated by a computer program and allow the experimenter, and his readers, to fairly balance the statistical and practical significance of the differences reported.

Incidentally, the origin of "lies, damned lies, and statistics" is uncertain. The balance of evidence suggests Mark Twain, rather than Benjamin Disraeli, was the author.

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