GROWING SQUARE TREES

Mr. Robert Falls, an environmental scientist and bio-engineer working at the University of British Columbia, appalled at the vast quantities of wood wasted when trees are sawn into lumber, decided that "there had to be a better way". His notion is simple: a designer tree of decidedly squarish appearahce which, when sawn at the mill, would reduce the amount of discarded bole. What sparked Mr. Falls to believe such dreams were possible was his earlier work on tree shape and wood formation in plants persistently battered by winds. Unusual structures form, with one side of the trunk making wood faster and creating an area of acutely thickened stem. Harnessing techniques which he prefers to call bio-resource engineering rather than genetic engineering, — "We have a patent pending; all I can say is that it is not gene splicing" — he has already tooled a dozen trees. The four-year-old cedars and black cottonwoods are growing on land close to the university, and studies have shown the wood quality is identical to their round cousins. "You get more cells at four points round the stem, not bigger ones. We are simply managing to accelerate wood formation at these sites. I suppose the bottom line is that we are altering the way the genes of the cambial cells express themselves at these four areas," he explained. Mr. Falls believes the pioneering of square trees has not only important resource implications for the timber industry but also for the environment. He claims that by bio-engineering an acceleration in wood growth the trees are consuming up to 38% more carbon dioxide — a constituent gas of the so-called greenhouse effect. He said there had been inquiries from lumber companies throughout America and hinted that one British timber firm had also expressed an interest in his square trees. *(Reproduced from Forestry Abstracts April 1989, Vol. 50. No. 4).*