



1. Introduction

Lodging is a major problem in rice production, especially in coastal areas where typhoons occur. Lodging can reduce yield by 20%–30% and even as much as 80% [



Corporation, Redmond, WA, USA). Figures were made with



3.2. Pot experiment

There was a significant difference ($P < 0.01$) in SPAD value



because L_0 is site- and season-specific. At a given LAI, rice crops grown in locations and seasons with more favorable radiation will have shorter basal internodes and hence greater lodging resistance. Compared to the late season, radiation in the early season is generally lower, and the basal internodes are normally longer. This difference explains why lodging occurs more frequently and heavily in the early season than in the late season in rice production in southern China.

Using Eq. (3), we can predict FIL using light intensity and LAI data as input (Table 5). We can also calculate the

indirectly by altering L_p and LAI. Optimizing N management



- [9] A.S. Peake, K.L. Bell, P.S. Carberry, N. Poole, S.R. Raine, Vegetative nitrogen stress decreases lodging risk and increases yield of irrigated spring wheat in the subtropics, *Crop*