Table 3. Chi-square test results of the effect of K application on the index of three cotton diseases.

Treatment, kg N-P_2O_5-K_2O/ha	Anthrac-nose	Root rot	Red leaf stem wilt
195-75-0	—	—	—
195-75-75	4.83*	3.21^{NS}	12.3**
195-75-150	5.20*	9.43**	18.9**
195-75-225	5.89*	10.38	30.6**

^{NS}, *, ** = non-significant, significant at 5%, and significant at 1%, respectively.

Table 4. Effect of K on reducing premature plant death and lodging in corn during 1989 drought, Hunan.

Treatment, kg N-P_2O_5-K_2O/ha	Lodging, %	Premature death, %
200-90-0	73.0	51.7
240-90-270	1.3	13.2

Conclusion

Potassium fertilizer has proven to be extremely important for crop growth on Hunan's K-deficient upland soils. This has been manifested in higher crop yields, improved crop quality, and increased farmer profit when K fertilizer was applied compared to no K application, but with N and P fertilizer applied at optimal rates.

For the majority of crops grown on these soils, an application of 150 kg K_2O/ha was considered to be a minimum to achieve high crop yield and quality, while higher rates often proved better for the high K demanding crops. **BCI**

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India: Response of Some Rabi Pulses to Boron, Zinc and Sulfate Application in Farmer Fields

Series of field trials were conducted on calcareous soils in the northern part of Bihar. A high percentage of these soils exhibit sulfur (S), boron (B) and zinc (Zn) deficiencies. Test crops were chickpea, lentil and broadbean. Boron application at 2 kg/ha and Zn application at 5 kg/ha on chickpea produced grain yield responses of 750 (60 percent yield increase) and 400 (28 percent yield increase) kg/ha, respectively. Boron application rate of 1 kg/ha increased lentil yields by 300 kg/ha, or 24 percent. Broadbean yield response to S applied at a rate of 40 kg/ha was 700 kg/ha, a 32 percent increase. In addition to yield responses, plant uptake of all three nutrients was increased by fertilization. **BCI**

Source: Fertiliser News, *Vol. 43 (11), p. 37, 39-40, November 1998.*