



DIFFERENT HARVEST DATES DUE TO SUPPRESSION IN SOME PHENOLOGICAL PHASE OF DRY BEAN

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INTRODUCTION

Dry bean (*Phaseolus vulgaris* L.) water stress results in accelerated maturity and grain yield reduction. Drought stress is one of the limiting factors for crop growth and yield which reduces dry matter production and yield components through decreasing leaf area and accelerating leaf senescence (Eman & Seghatoleslami, 2005).

OBJECTIVE

The objective of this study was to compare different harvest dates of bean Carioca group IAC Alvorada due to suppression in some phenological phase of bean.

MATERIAL AND METHODS

The experiment was conducted in plots in a greenhouse at Sao Paulo State University (UNESP), Botucatu – São Paulo – Brazil (Figure 1). It was planted in May 27th, 2011. The statistical design was randomized blocks with thirty-two treatments and four replications in vase of 9L. The tensiometer (Figure 2) was used to detect the critical stress between 30 to 35 kPa.



Figure 1. Greenhouse



Figure 2. Tensiometer

RESULTS

Table 1. Thirty-two treatments. ■ Irrigation □ Without Irrigation

TREATMENT	HARVEST	Until V3	V4 – R7	FLOWERING	POD FORMATION	FILLING POD
T1	09/16/11	■	■	■	■	■
T2		■	■	■	■	■
T3		■	■	■	■	■
T4	09/22/2011	■	■	■	■	■
T5	09/26/2011	■	■	■	■	■
T6		■	■	■	■	■
T7	09/09/2011	■	■	■	■	■
T8		■	■	■	■	■
T9		■	■	■	■	■
T10		■	■	■	■	■
T11		■	■	■	■	■
T12		■	■	■	■	■
T13		■	■	■	■	■
T14		■	■	■	■	■
T15		■	■	■	■	■
T16		■	■	■	■	■
T17		■	■	■	■	■
T18		■	■	■	■	■
T19		■	■	■	■	■
T20		■	■	■	■	■
T21		■	■	■	■	■
T22		■	■	■	■	■
T23		■	■	■	■	■
T24		■	■	■	■	■
T25		■	■	■	■	■
T26		■	■	■	■	■
T27		■	■	■	■	■
T28		■	■	■	■	■
T29		■	■	■	■	■
T30		■	■	■	■	■
T31		■	■	■	■	■
T32		■	■	■	■	■

CONCLUSIONS

The lack of irrigation at some stages of dry bean affects the crop harvest, in at least 17 days.

REFERENCES

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