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SAO PAULO STATE UNIVERSITY "JULIO DE MESQUITA FILHO" Botucatu

COLLEGE OF AGRONOMICAL SCIENCES

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

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Visions for a Sustainable Planet

INTRODUCTION

RESULTS

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

Table 1. Thrirty-two treatments. Irrigation Without Irrigation

TREATMENT	HARVEST	Until V3	V4 – R7	FLOWERING	POD FORMATION	FILLING POD
T1	09/16/11					l
T2		I				
T3						
T4	09/22/2011					
T5	09/26/2011					
T6						
Τ7	09/09/2011					
T8						
Т9						
T10						
T11						
T12						
T13						
T14						
T15						
T16						
T17						
T18						
T19						
T2 0						

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

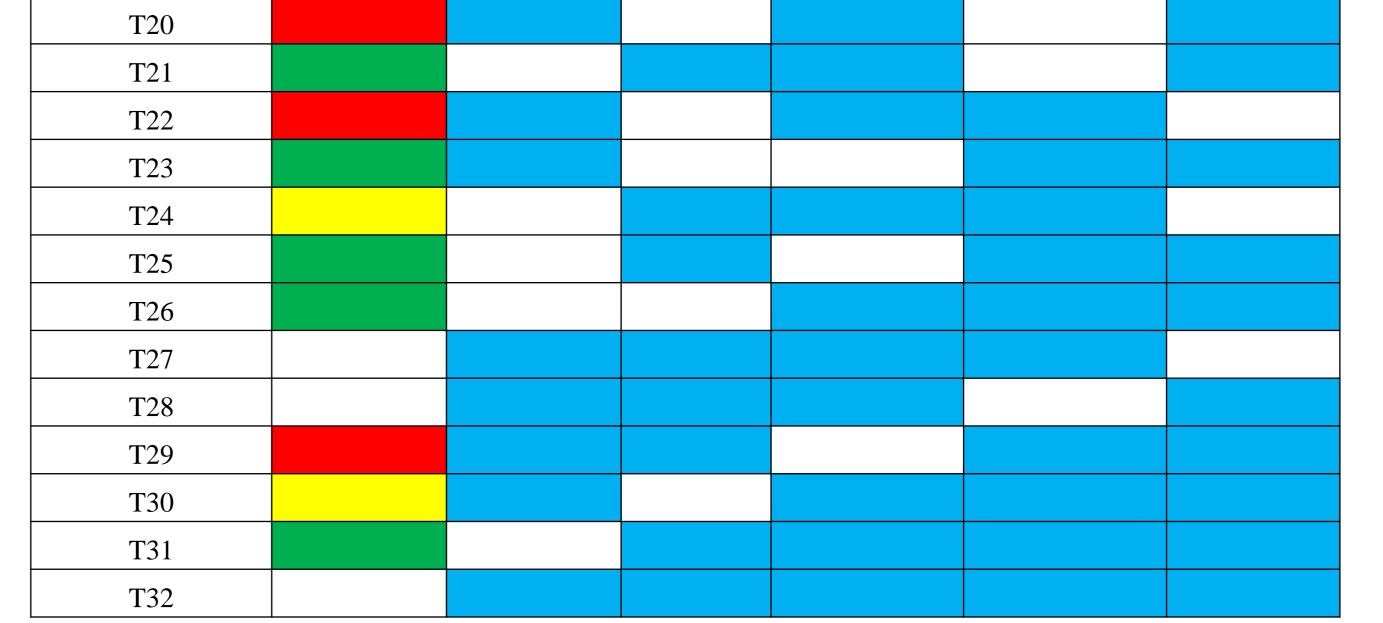
was planted in May 27th, 2011. The statistical design was randomized

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.





CONCLUSIONS

The lack of irrigation at some stages of dry bean affects the

crop harvest, in at least 17 days.







Emam, Y. and M.J. Seghatoleslami, 2005. Crop Yield: Physiology

and Processes. First edition. Shiraz University Inc., Shiraz. pp:





Figure 1. Greenhouse



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