

**EFFECTS OF DROUGHT OR REMOVED OF VEGETATIVE  
GROWTH STOPPING IRRIGATION AND CURING ON 3:- SOME  
STORABILITY CHARACTERSTICS OF POTATO TUBERS *Solanum  
tuberosum* L.**

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**ABSTRACT**

The study were conducted at spring season , using potato tuber *Solanum tuberosum* L. var. Desiree . This potato tuber was planted after initiative processing and mechanical separated infection and damage Tubers on label ( 4.5 x 1.6 m ) .This experiment included eight treatments combined with removal vegetative growth and stop irrigation when pulling tubers as follows :-

- 1- Handling removal of vegetative growth with stopping irrigation before 22 days from harvesting .
- 2- Handling removal of vegetative growth before 22 days with stopping irrigation before 11 days from harvesting .
- 3- Handling removal of vegetative growth before 22 days with stopping irrigation before 6 days from harvesting.
- 4- Dry out of vegetative growth by using Gramoxsone herbicide and stopping irrigation before 22 days from harvesting .
- 5- Dry out of vegetative growth by using Gramoxsone herbicide before 22 days with stopping irrigation before 11 days from harvesting .
- 6- Dry out of vegetative growth by using Gramoxsone herbicide before 22 days with stopping irrigation before 6 days from harvesting.
- 7- Dry out of vegetative growth by using basta substance before 17 days with stopping irrigation before 6 days from harvesting .
- 8- Leaving vegetative growth with out removing with stopping irrigation before 6 days from harvesting .

The measurements of quality characteristics were conducted after tuber pulling, and then divided in to two groups ( for 8 field treatments) which weight 5 kg from each part stored in net plastic bags .

The first part stored in cool immediatly with out dry out treatment ( curing) in  $0 \pm 4$  °C and humidity  $85 \pm 5$  % , Whereas the second part of treatments take For both parts to cool e place which dry out treatment in  $10 - 15$  °C and Humidity  $80 - 85$  % for 15 days , then transported for both parts to cool store for three months , then

transported to reconditioning ( represent marketing state) in( 31- 35 °c) and Humidity ( 46-53 %) for ten days , therefor the study included 16 treatment , distributed in factorial experimental in three replicates according to R.C,B,D. design, means were compared according to L.S.D. test with 5% significant level . The results shows that field treatment Significant effect in stored characteristics under study . Whereas dry out treatment for vegetative growth in basta before 17 days with stop irrigation before six days from time of pulling out of tubers were superiority and increased the percentage for each dry matter and carbohydrates and starch as well as increased of quality density of tubers. Treatment of removal of vegetative growth by hand and stopping irrigation before 22 days from pulling out of tubers resulted to increase tubers hardness whereas the treatment of leaving vegetative growth with stopping irrigation before six days lead to increase the percentage of T.S.S. When investigated the effect of treatments by dry out (curing) in the end of storage , found the superiority of with out dry out lost, increased the hardness of tubers percentage of dry matter, carbohydrate ,starch and quality density and T.S.S.

**Key words:** potato , *Solanum tuberosum* L. , haulm desiccation , stop irrigation , curing