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11.05.94 תאריך:

ד"ר דיוגן מדעי

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255-0028-92 : זיכוי

נושא המחקר: שיפור תוצרת של תפ"א באדמות מתפתחות

סוג ת"ת : מדעי מדעי

חוקר ראשי : ד"ר דוד

חוקרים משניים: ד"ר אבנר
מאירי אברהם
חמיאל אברהם

מקורות מימון: עבודה מיועצת ד"ר

מרכז ביול למחקר בהפ"א CIP

תקציר הדו"ח:

STUDIES SEEKING THE APPROPRIATE MANAGEMENT FOR IRRIGATING POTATOES WITH SALIN ALLOWS THE MAINTENANCE OF A DESIRED SOIL WATER POTENTIAL THROUGH THE GROWING PERIOD, THE PUSH OF THE SALINITY FRONT AWAY FROM THE ROOT'S ZONE, AND AVOIDS WETTING OF THE HAULM AND SALINITY DAMAGE TO THE LEAVES. ACCUMULATION OF DRY MATTER AND MINERALS IN THE PLANT WERE ALSO STUDIED. TUBER YIELDS UP TO CA. 25 TONES/HECTARE WERE OBTAINED WITH WATER SALINITY OF UP TO 5 DS/M.

SALINITY (OVER 3 DS/M) RETARDED EMERGENCE OF POTATOES AND GROWTH.

SALINITY SIGNIFICANTLY RETARDED THE GROWTH OF POTATO ROOTS.

REDUCED ROOT RESPIRATION, REDUCED STOMATAL CONDUCTANCE AND AFFECTED CYTOKININ CONTENT. OSMOTIC ADJUSTMENT WAS ALSO EVIDENT.

IRRIGATION REGIME WITH FRESH WATER DID NOT HAVE AN EFFECT ON ROOT COLONIZATION WITH RHIZOCTONIA SOLANI, BUT LOWER WATER QUANTITIES ENHANCED COLONIZATION OF ROOTS WITH VERTICILLIUM DAHLIAE. NO OOSPORES OF P. INFESTANS WERE FOUND IN FIELD GROWN POTATOES.

SALINITY INCREASED THE INCIDENCE OF V. DAHLIAE IN POTATO STEMS AND ENHANCED PLANT STUNTING. HIGHER GLYCOALKALOID CONTENT WAS FOUND IN TUBERS GROWN IN THE SPRING AND SUMMER SEASONS AS COMPARED TO THOSE GROWN IN THE COOLER CLIMATE OF THE MILD WINTER SEASON TYPICAL OF THE MEDITERRANEAN REGION. NO CHANGES WERE NOTED DURING STORAGE OF 230 DAYS AT ROOM TEMPERATURE.

תיומנות ואישורים:

12.5.94

חוקר ראשי מנהל המחקר מנהל המכון אמרבלות תאריך

היכל (ש"ח)
למחקר פתוח
ע"י המחקר

א"ה