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تأثير مياه الصرف الصحي المعالجة على تكوين العقد وتثبيت النيتروجين في نبات الفول البلدي
- Document Language** : Arabic
- Abstract** : An experiment was carried out inside the green house that was constructed mainly for it in the female section of King Abdulaziz University Jeddah, during the period 27/8/2002M. to 30/11/2002M. to study the effect of irrigation by different treatments of sewage water and inoculation with strains of Rhizobial bacteria that have different activities on formation of root nodules, N-fixation, growth and yield in faba bean plants (cv. Giza 843), the results showed that sample date has significant effect on studied characters, with the date of the second sample (95 days) dominating date of the first sample (55 days) as regard to FW, DW, and N-contents of the different parts of the faba bean plant (shoot, root, root nodules) and in total leaf area, stem diameter and length and number of nodules. The rhizobia strain 2435 exceeded other strains in FW, DW, N-content of the plant and its different parts (shoot, root, root nodules) and in total leaf area, stem diameter, of root nodules and number of flowers, seconded by strain no 2500 and R1 and R2. Also strain 2435 was dominant in stem length of faba bean plants, followed by R1 , R2 and strain no 2500. As for irrigation sewage water diluted to 75% dominated all other treatments in wet and dry weight and in N-content for faba bean plant and its parts (shoot, root, root nodules) and in total leaf area, stem length, number of nodules and number of flowers. This was followed by the treated sewage water and the treatment 50% dilution of sewage water. Also the treatment 75% dilution dominated in stem diameter of the plant, seconded by the treatment 50% dilution, and the treated sewage water. But 100% sewage water gave the lowest values in wet and dry weight, N-content of all parts of the plant (shoot, root, root nodules) and in leaf area, stem diameter, number of root nodules and in number of flowers. Tap water showed the lowest stem length
- Supervisor** : أ. د. فهد بن عبد الرحمن الفاسي، د. زكية بنت علي القناوي
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