

## عنوان مقاله:

Comparison of furrow, drip tape irrigation, ۲-hole bottle and sub-surface tape irrigation on the yield and yield component of (*Raphanus sativus* var. *longipinnatus*) radish

## محل انتشار:

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## خلاصه مقاله:

The purpose of this experiment is the comparison between four different method of irrigation which include: furrow irrigation, drip tape irrigation, sub-surface (t-tape ۵ cm under soil) drip irrigation, and ۲-hole bottle irrigation. This experiment was carried out in ۲ continuous sowing season first was from November to January and the second one was from January to March of ۲۰۲۰-۲۰۲۱. In the first experiment, it is observed no significant difference in any components of radish which may be due to mild weather condition and sufficient rain fall. However, the best treatment for arid areas like Ahvaz, was bottle irrigation treatment with yield of ۶۸۰.۶ kg. ha<sup>-۱</sup> and water productivity of ۰.۳ kg.m<sup>-۳</sup> and the least irrigated water. In this second experiment due to the lack of rainfall and abundance of sunlight the amount of water consumed for treatments increased. In the experiment bottle irrigation yield was ۲۹۸.۲۴ kg. ha<sup>-۱</sup> and water productivity was ۰.۱۰۵ kg.m<sup>-۳</sup>. In conclusion bottle irrigation for poor countries with limited water supply, areas where the cost of assembling a drip system is high or in counties or arid areas which suffer from lack of rainfall can be efficient in producing vegetable for household consumption. For better performance this form of irrigation can be automated which increase system's productivity. Bottle irrigation is low-cost, easy to operated and doesn't require manpower which makes it the ideal irrigation for poor countries like Africa and arid areas same as Ahvaz

## کلمات کلیدی:

Arid areas, irrigation, Radish, Treatment, Water productivity, Yield

## لینک ثابت مقاله در پایگاه سیویلیکا:

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