

## عنوان مقاله:

Sufficient application of NPK fertilizers: A practical and efficient strategy in the management of Verticillium wilt of potato var. Agria

## محل انتشار:

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## خلاصه مقاله:

Field experiment was conducted in ۲۰۱۰ and ۲۰۱۱, in order to study the effects of NPK fertilizers on the incidence of Verticillium wilt of a commercial variety 'Agria' in deficient soil at Eghlid Agriculture Research Station in the north of Fars province, Iran. Experimental design was randomized complete blocks and each treatment replicated three times. Treatments were the amounts of recommended NPK rate (۱۸۰N, ۱۲۵P, ۱۰۰K), ۲۰% and ۴۰% less and more than the rate based on the soil tests. Soil at planting sites was inoculated with ۵ ml of microsclerotia suspension (۷۰ ms/ml). Tubers weight, plant height and disease scores were recorded. Two-year combined analysis indicated that there were significant differences at ۱% level between the treatments. The results showed a marked decrease in Verticillium wilt incidence and increase in yield when NPK was used at the recommended rate. Lowest disease score and highest yield even more than the cultivar potential were obtained in the plots when N was used ۴۰% more than the recommended level of the soil test (۲۵۲ N), combined with K at the level of the soil test (۱۰۰ K). P was essential for plant growth but had no effect on the disease.

## کلمات کلیدی:

Potato early dying, Verticillium dahliae, Disease control, Fertilizers, NPK

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1811726>

