

## بررسی اثر مدیریت منفرد و تلفیقی علف‌های هرز بر تراکم و زیست توده علف‌های هرز باریک برگ و زیست توده گوجه فرنگی

ابراهیم کازرونی منفرد<sup>۱</sup>، علیرضا کوچکی<sup>۲</sup>، مهدی نصیری محلاتی<sup>۲</sup> و شهاب اقبالی<sup>۱</sup>

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۱ و ۲ بترتیب دانشجویان کارشناسی ارشد و عضو هیئت علمی گروه زراعت و اصلاح نباتات، دانشکده کشاورزی، دانشگاه فردوسی مشهد.

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(*Cypruss sp.*)

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(*Amaranthus spp*)

(*Chenopodium album*)

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*Cynodon* )

(*Cypruss rotundus*)

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(*dactylon*

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(H<sup>2</sup>)

(W<sup>3</sup>)

(R<sup>4</sup>)

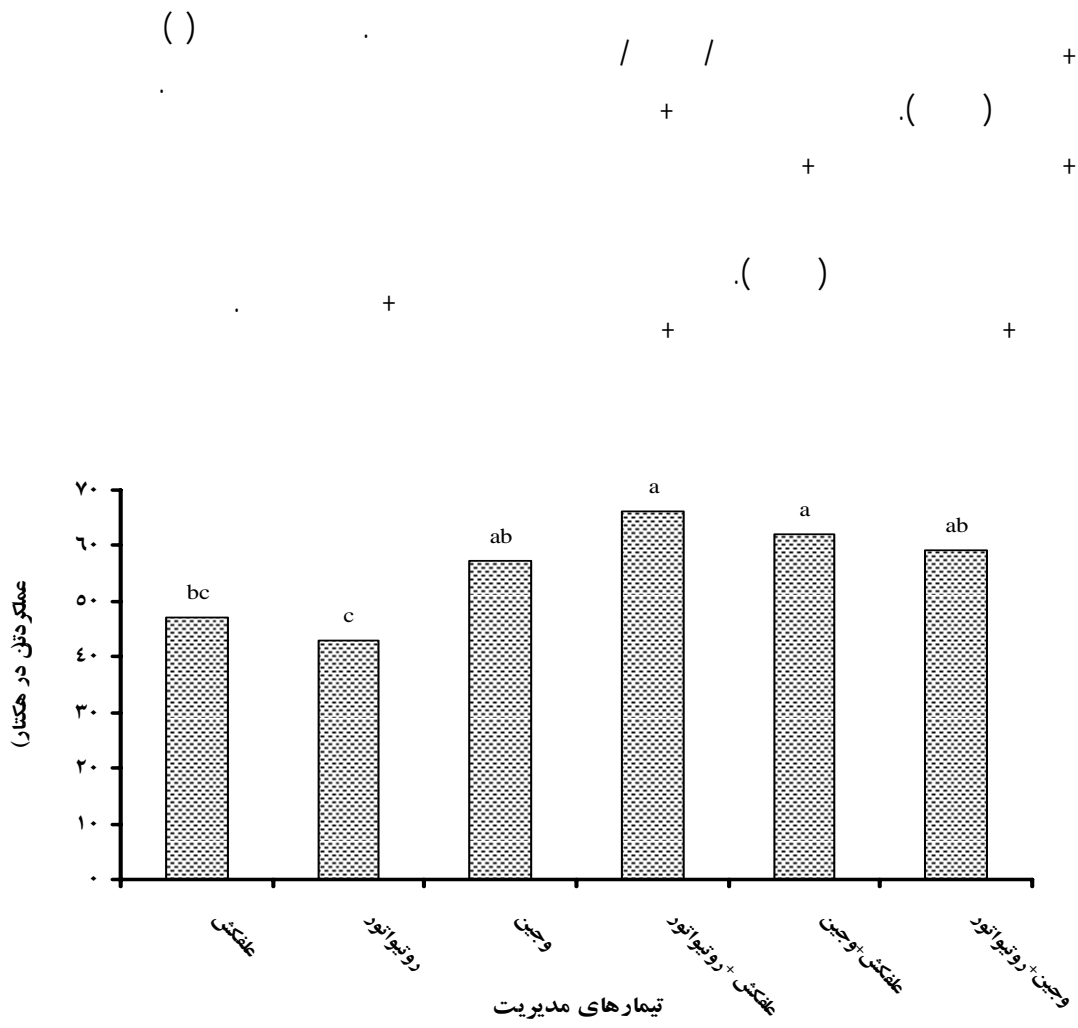
(H+W) +

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2 Herbicide  
3 Hand weeding  
4 Rotivator



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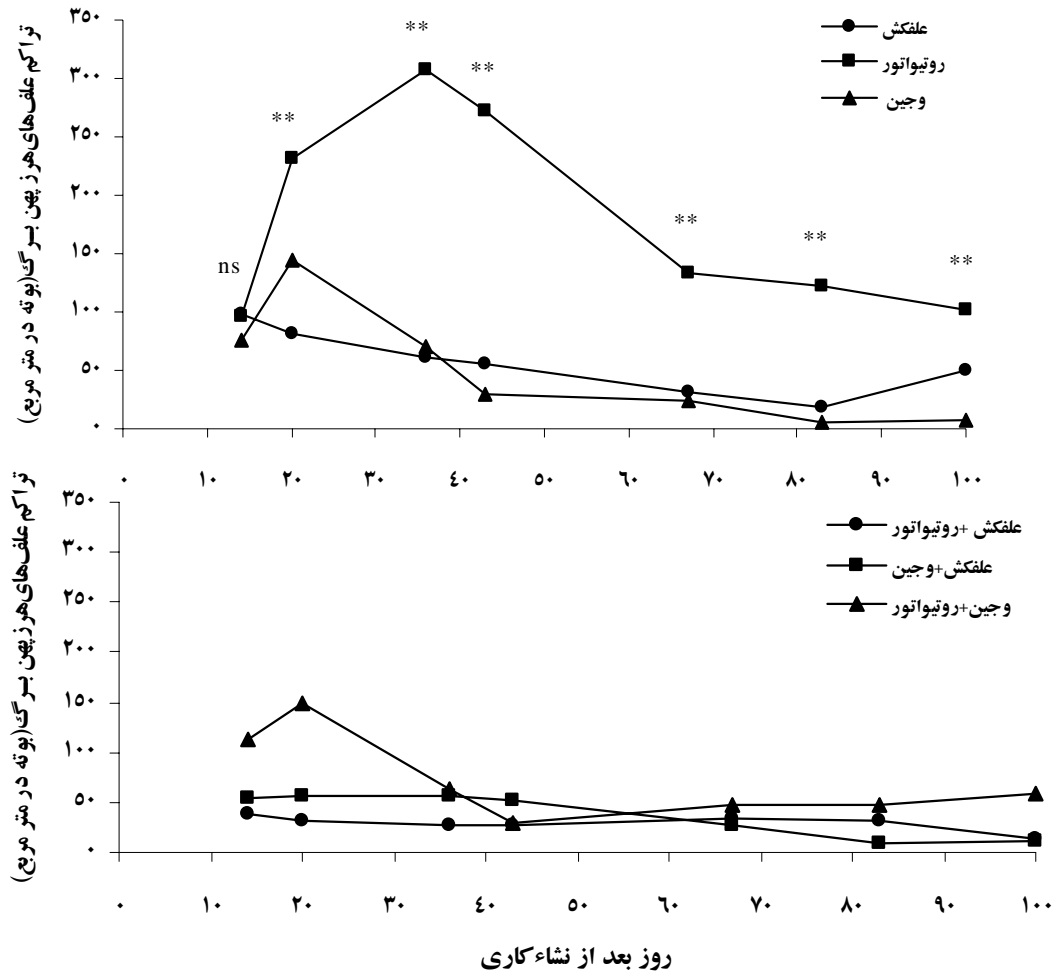
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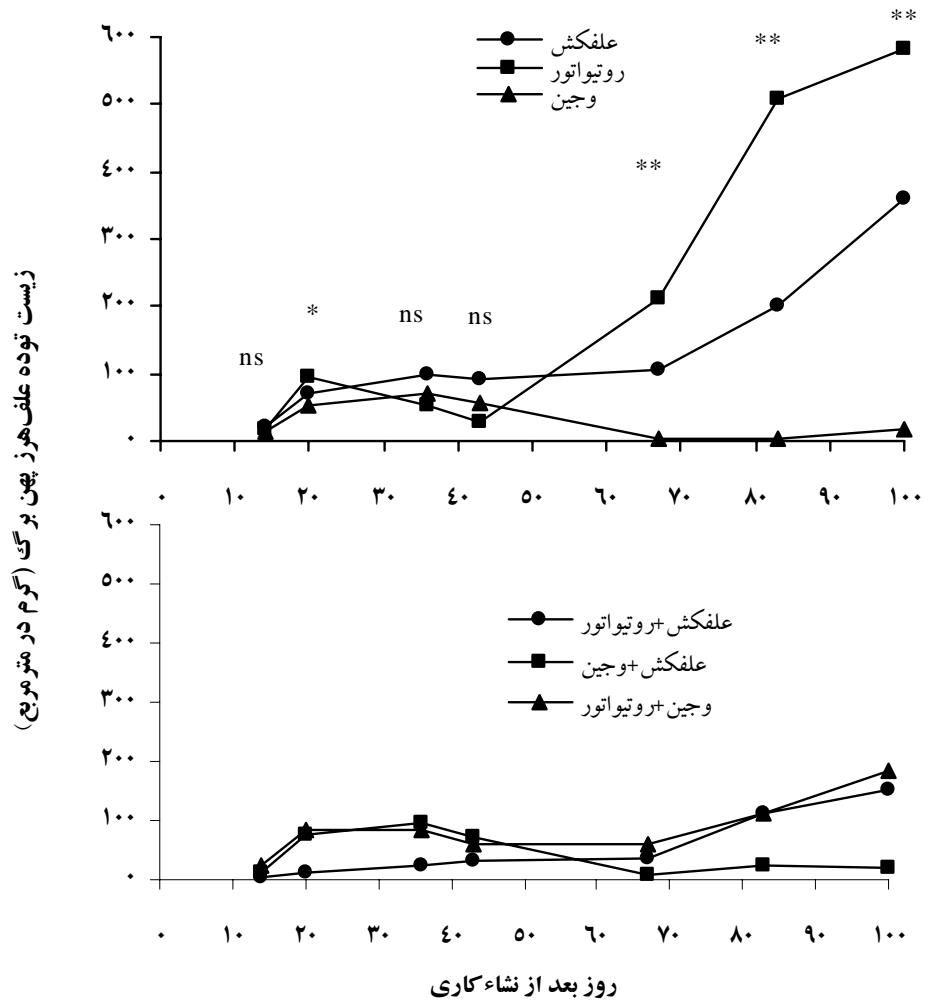
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## The effects of integrated and single management method on weed biomass and density and tomato yield

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### Abstract

Although, various weed control methods have been developed, weeds pose a permanent threat to the crop production. A field study was conducted in 2004 at the Ferdowsi University of Mashhad Research Field to evaluate the effects of different weed managements and their integration on weed density and biomass and tomato yield. The experiment was designed as a strip plot based on complete randomized block design with three replications. Treatments were two tillage systems (reduced and conventional) and six weed management methods (herbicide, rotary cultivator, handweeding, herbicide plus rotary cultivator, herbicide plus handweeding, and handweeding plus rotary cultivator). The herbicide, handweeding, and rotary cultivator treatments were applied 2, 3, and 6 weeks after transplanting, respectively. The highest and lowest amounts of tomato yields were obtained in herbicide plus rotary cultivator and rotary cultivator, respectively. Density and biomass of broadleaved weeds was affected by different weed managements, and they were controlled by handweeding and its integration with herbicide better than other treatments. Different weed managements had no effect on grass weeds density, except by the end of growing season. Handweeding treatment and its integration with herbicide, also, controlled grass weeds better than the other treatments. In conclusion, integrated treatments in comparison with single treatments decreased weed density and biomass and increased tomato yield. The least weed control and tomato yield was obtained in rotary cultivator treatment.

**Keywords:** Reduced tillage, Conventional tillage, Weeds, Tomato, Integrated weed management.

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