

# Growth performance of black cumin ( *Nigella sativa* L.) plants using certain growth conditions

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In the present study the growth of black cumin *Nigella sativa* L plant were studied using certain elements (i.e. Boron, sulphur and potassium) and some the growth regulators (i.e. Naphthalene acetic acid, Benzyl adenine and paclobutrazal) as separated treatments as well as some of their combination, Therefore, experiments were included, laboratory experiments for studying germination aspects under different applied treatments. Also, pot experiments for studying vegetative and reproductive growths as well as hormonal and anatomical studies. Besides, field experiments for yield determination specially its economic part (i.e. seeds and oil yields) as well as some of their chemical bioconstituents, Experiments were carried out in the experimental form of Agric. 1Bot. Department Faculty of Agric. Moshtohor for pot experiments yet, were in the vegetable production station, Dept. of Horticulture sci. during 2003 and 2004 successive seasons The following treatments were applied in different assigned testaments: The applied treatments : ( Seeds soaking) : A- Separately treatments: 1- in elements: Boron (B) at 50 ppm ( in form of Boric acid), boron (B) at 250 ppm ( in form of Boric acid). In the present study the growth of black cumin *Nigella sativa* L plant were studied using certain elements (i.e. Boron, sulphur and potassium) and some the growth regulators (i.e. Naphthalene acetic acid, Benzyl adenine and paclobutrazal) as separated treatments as well as some of their combination. Therefore, experiments were included, laboratory experiments for studying germination aspects under different applied treatments. Also, pot experiments for studying vegetative and reproductive growths as well as hormonal and anatomical studies. Besides, field experiments for yield determination specially its economic part (i.e. seeds and oil yields) as well as some of their chemical bioconstituents. Experiments were carried out in the experimental form of Agric. 1Bot. Department Faculty of Agric. Moshtohor for pot experiments yet, were in the vegetable production station, Dept. of Horticulture sci. during 2003 and 2004 successive seasons The following treatments were applied in different assigned testaments: The applied treatments : ( Seeds soaking): A- Separately treatments : 1- in elements : Boron (B) at 50 ppm ( in form of Boric acid), •Boron (B) at 250 ppm ( in form of Boric acid), In the present study the growth of black cumin *Nigella sativa* L plant were studied using certain elements (i.e. Boron, sulphur and potassium) and some the growth regulators (i.e. Naphthalene acetic acid, Benzyl adenine and paclobutrazal) as separated treatments as well as some of their combination. Therefore, experiments were included, laboratory experiments for studying germination aspects under different applied treatments. Also, pot experiments for studying vegetative and reproductive growths as well as hormonal and anatomical studies. Besides, field experiments for yield determination specially its economic part (i.e. seeds and oil yields) as well as some of their chemical bioconstituents. experiments were carried out in the experimental form of Agric. 1Bot. Department Faculty of Agric. Moshtohor for pot experiments yet, were in the vegetable production station, Dept. of Horticulture sci. during 2003 and 2004 successive seasons, the following treatments were applied in different assigned testaments: The applied treatments: ( Seeds soaking) : A- Separately treatments : 1- in elements : Boron (B) at 50 ppm ( in form of Boric acid), Boron (B) at 250 ppm ( in form of Boric acid).