



قسم المحاصيل



جامعة الفيوم  
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### First Article:

<b>Article title</b>	<b>Foliar-applied Amcoton<sup>®</sup> and potassium thiosulfate enhances the growth and productivity of three faba beans varieties by improving photosynthetic efficiency</b>
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Amcoton<sup>®</sup> [a mixture of 0.45% naphthalene acetic acid and 1.25% naphthalene acetamide] and potassium thiosulfate (KTS) play a crucial role in growth and productivity enhancement of faba beans plants. The current study aimed to evaluate the potential impact of Amcoton<sup>®</sup> and KTS foliar application on growth, yield, and photosynthetic efficiency in three faba beans varieties (i.e. Giza-843, Nubaria-3, and Sakha-4) during 2016-17 and 2017-18 seasons. Results exhibit-ed that Amcoton<sup>®</sup> and/or KTS significantly increased growth indices (e.g., plant height, number of leaves and branches, leaves area, shoot dry weight), yield component, and chlorophylls contents and photosynthetic efficiency in comparison with untreated control plants. Giza-843 showed significantly higher growth and productivity when compared to Nubaria-3 and Sakha-4. Seed yield significantly positive correlated with leaves area, chlorophyll content, plant height, number of branches, pods and seeds per plant, pod dry weight and biological yield. Results obtained through this study highlighted the potential impact of Amcoton<sup>®</sup> and/or KTS on enhancing the growth and productivity of faba beans plants by improving leaf chlorophylls contents and photosynthetic efficiency .