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| Title | Evaluation of Nitrogen, Phosphorus and Potassium Nano-Fertilizers on Yield, Yield Components and Fiber Properties of Egyptian Cotton (Gossypium Bar-badense L.) | | |
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| Abstract |  |
| Field experiments were carried out in Agricultural and Experimental Research Station in years 2016 and 2017 to evaluate NPK nano- fertilizers application, times, methods and rates on yield and fiber properties of Egyptian cotton (Giza, 90). Th e experiment was laid out in a split-split-plot based on Randomized Complete Block Design with four replications. Treatments included two application times were applied in main plots, two application methods are foliar and soil in sub-plots and four rates applications of control (100% soil application traditional recommended NPK fertilizer dose (RFD) and nano NPK fertilizers 12.5%, 25% and 50% RFD) were applied in sub-sub-plots. Significant increases of total and open bolls per plant, boll weight and seed cotton yield as a result of the application of three times NPK nano-fertilizers than two times. Foliar nano-fertilizers application of these traits recorded higher values at the previous parameters than soil application. In the most of studied parameters nano-fertilizers at 50% RFD recorded values statistically at per with control traditional (100% RFD). Also, treatments of 12.5% at per with 25% NPK nano-fertilizers. Interactions between the studied three factors were insignificant in studied parameters except lint%. Whereas, the highest values of previous traits were obtained from plots treated with 50% RFD nano NPK with split 3 times and applied by foliar application in most cases. Th e application rates of NPK nano fertilizers significantly influenced studied fi ber properties. Also, times and methods of application influenced fiber length in second season and application methods influenced Length uniformity Index in second seasons. All the interaction between study factors cleared no significant effect on fiber quality parameters except interaction between times and methods of application also, between times and rates of application had a significant effect on fiber strength in second season only. | |

**Please specify which Sustainable Development Goal (SDG) (s) falls under your research:**

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| Goal 1 | No Poverty | Goal 2 | Zero Hunger |
| Goal 3 | Good Health and Well-Being | Goal 4 | Quality Education |
| Goal 5 | Gender Equality | Goal 6 | Clean Water and Sanitation |
| Goal 7 | Affordable and Clean Energy | **Goal 8** | **Decent Work and Economic Growth** |
| Goal 9 | Industry, Innovation and Infrastructure | Goal 10 | Reduced Inequalities |
| Goal 11 | Sustainable Cities and Communities | Goal 12 | Responsible Consumption and Production |
| Goal 13 | Climate Action | Goal 14 | Life below Water |
| Goal 15 | Life on Land | Goal 16 | Peace, Justice and Strong Institutions |
| Goal 17 | Partnerships for the Goals |  |  |