

# Green synthesis of sulfur nanoparticles using Punica granatum peels and the effects on the growth of tomato by foliar spray applications

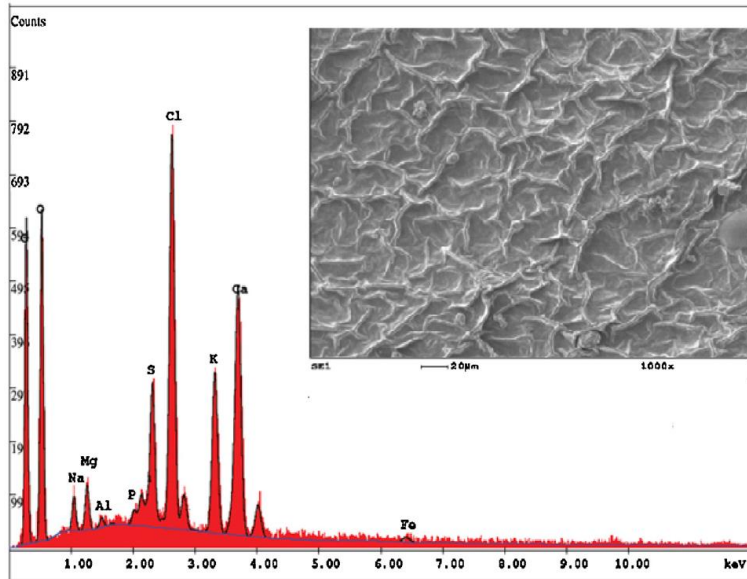


Fig. 4. SEM and EDS analysis of tomato leaves.

Element	0 ppm (Control)		100 ppm SNPs	
	Leaves (Wt.%)	Fruits (Wt.%)	Leaves (Wt.%)	Fruits (Wt.%)
C	46.2 ± 0.8	51.3 ± 0.27	46.6 ± 0.35	51.5 ± 0.46
O	36.1 ± 0.2	43.5 ± 0.26	36.1 ± 0.21	43.5 ± 0.27
Na	0.2 ± 0.02	0.2 ± 0.02	0.2 ± 0.02	0.2 ± 0.03
K	7.9 ± 0.25	2.2 ± 0.21	7.9 ± 0.25	2.2 ± 0.20
Mg	0.7 ± 0.3	0.2 ± 0.02	0.7 ± 0.31	0.21 ± 0.02
Ca	2.0 ± 0.21	0.3 ± 0.02	2.0 ± 0.22	0.31 ± 0.026
Fe	BDL	0.3 ± 0.06	BDL	0.3 ± 0.036
Si	0.2 ± 0.02	0.3 ± 0.06	0.2 ± 0.02	0.3 ± 0.04
Al	0.1 ± 0.02	1.3 ± 0.08	0.1 ± 0.04	1.4 ± 0.36
P	0.7 ± 0.05	0.1 ± 0.02	0.7 ± 0.27	0.11 ± 0.02
Cl	3.1 ± 0.17	0.5 ± 0.02	3.3 ± 0.18	0.51 ± 0.03
S	BDL	BDL	1.0 ± 0.02	0.11 ± 0.03

BDL= Below Detection Limit.

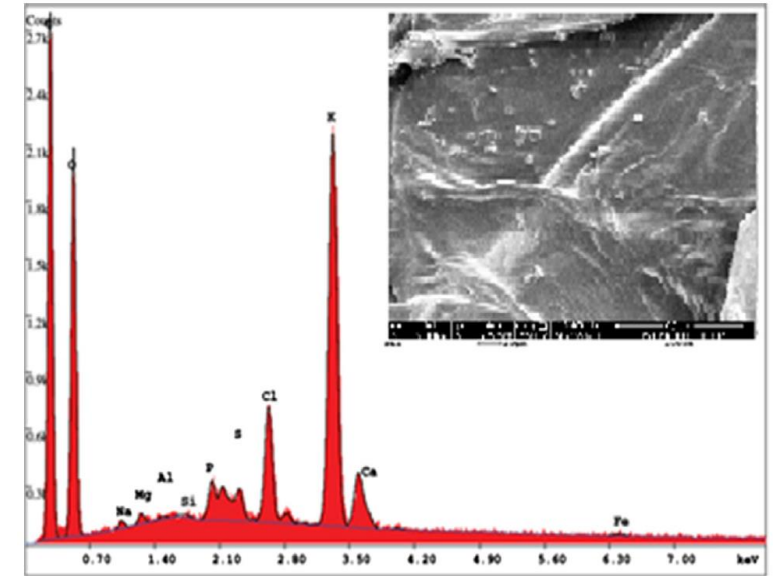


Fig. 5. SEM and EDS analysis of tomato fruits.

- \* They use SEM to see the structure of tomato leaves and fruits
- \* Additionally the use of EDS was to confirm the elements that compound those leaves and fruits
- \* They conclude that the use of SNP are beneficial to the plant growth.

- Salem, N. M., Albanna, L. S., & Awwad, A. M. (2016). Green synthesis of sulfur nanoparticles using Punica granatum peels and the effects on the growth of tomato by foliar spray applications. *Environmental Nanotechnology, Monitoring & Management*, 6, 83-87.