

Synthesis of an Organic-Inorganic Salt of (C₂H₅NO₂)₂H₄SiW₁₂O₄₀ and Investigation of Its Anti-Viral Effect on the Tobacco Mosaic Virus (TMV)

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Abstract : Polyoxometalates (POMs) are important inorganic compounds that have been considered specifically in recent years due to abundant attributes and applications. Those POMs that have one central tetrahedral atom called kegglin. The binding Amino-acid groups to kegglin structure give the antiviral effect to these compounds. A new organic-inorganic hybrid structure, with formula (Gly)₂H₄SiW₁₂O₄₀ was synthesized. Investigation on Anti-viral effect of this compound showed the (Gly)₂H₄SiW₁₂O₄₀ prevents infection of Tobacco Mosaic Virus (TMV) on the Nicotianatabacum plants.

Keywords : Polyoxometalate, Keggin, Organic-inorganic salt, TMV

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