



SYNTHESIS OF SILVER NANOPARTICLES FROM thymus serpyllum

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3.2 Preparation of Plant Extract

Plant extract was prepared by modification of the protocol of Sun et al. (2014). 10 grams of plant powder was washed in 100 ml distilled water in Erlenmeyer flask at room temperature for five minutes and then heated at 60°C for 15 minutes in a beaker. The extract was made to cool for half an hour and then supernatant was collected and twice filtered through 0.45 µm pore size filter paper using vacuum filtration assembly. The filtrate obtained was stored at 4°C in a stock solution for to be used within 1 week.

3.3 Synthesis of Thymus serpyllum Mediated Silver Nanoparticles

The stock solution of plant, acting as reducing and capping agent for the precursor, was diluted to 15% (v/v). 0.10 ml of silver nitrate (10 mM) was added drop by drop per second into the 14.2 ml solution taken from 15% diluted extract of Thymus serpyllum under magnetic stirring at 300 rpm and 25°C temperature. This working solution was then kept in dark in rotary orbital shaker for 7 hrs at 700 rpm and 25°C temperature, followed by monitoring after every 1 hour using UV Spectrophotometer for SPR band.

3.4 Purification of Nanoparticles

