

One-step biofabrication of copper nanoparticles from *Aegle marmelos* Correa aqueous leaf extract and evaluation of its anti-inflammatory and mosquito larvicidal efficacy.

Gangadhara Angajala, Pasupala Pavan, R. Subashini*

Organic Chemistry Division, School of Advanced Sciences, VIT University, Vellore 632014, Tamilnadu, India.
Fax: 91-416 224 3092; Tel: 0416 220 2352; E-mail: dr.subashini.r@gmail.com.

Supplementary file

Synthesis of CuNPs from CuF_2 by using NaBH_4 as reducing agent

Procedure

Aqueous solution (1 mM) of Copper fluoride (CuF_2) and (0.5 mM) of NaBH_4 was freshly prepared with milli Q water and used for the synthesis of CuNPs. The pH of the solutions was adjusted to 10 by using NaOH. To 80 ml CuF_2 solution 1% gelatin was added (to increase the separation of nanoparticles and to prevent clumping during the formation of nanoparticles) and kept for stirring at room temperature (30 °C). To the above stirred solution 20 ml of NaBH_4 was added drop wise and the reaction was further carried out at room temperature (30 °C) for 8 h. The solid precipitate obtained after keeping at room temperature was centrifuged at 3500 rpm for 20 min and the solid particles settled at the bottom were separated by using Anodisc 13 membrane filters.

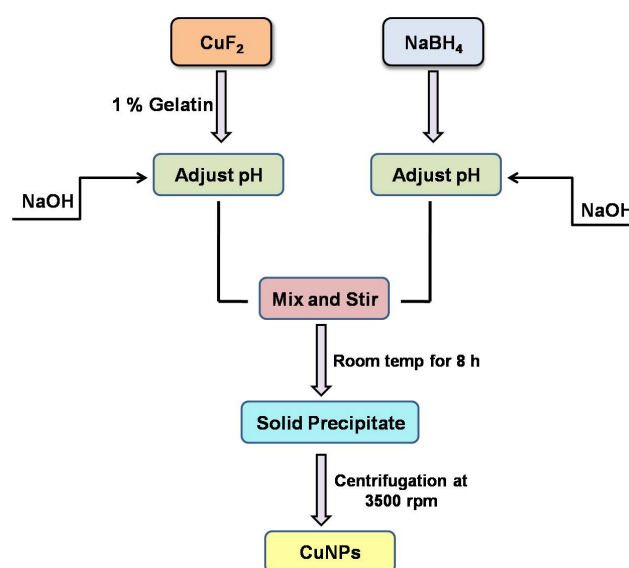


Fig.1 Synthesis of CuNPs by chemical reduction method.