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## Synthesis, antimicrobial and antioxidant activity of novel 2,6-dipheny-l-3alkylpiperidin-4-one-O-[2,4,6-tritertiarybutyl-cyclohexa-2,5-dienon-4yl]oximes

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## ABSTRACT

Synthesis of some novel 2,6-Diphenyl-3-alkylpiperidin-4-one-O-[2,4,6-tritertiarybutylcyclohexa-2,5dienon-4-yl] oximes by treating 2,4,6-tritertiarybutyl phenol with corresponding piperidin-4-one oximes in the presence of an oxidising agent,  $MnO_2$  under nitrogen atmosphere. The compounds are characterized using IR, GC-MS, Elemental analysis and <sup>1</sup>H and <sup>13</sup>C NMR spectral analysis. All the synthesized compounds are screened for anti-oxidant and anti-microbial activities.

**Keywords:** 2,6-dipheny-1-3-alkylpiperidin-4-one-O-[2,4,6-tritertiarybutyl-cyclohexa-2,5-dienon-4-yl] oximes, NMR Spectral analysis, antibacterial activity, antifungal activity, antioxidant activity.