

# Study of Phytochemical Screening, Physicochemical Analysis and Antioxidant Activity by DPPH Radical Scavenging Method of *Quercus lamellosa* Sm.

Aita Rani Subba and Santosh Kumar Rai

Department of Botany, Sikkim University,  
6<sup>th</sup> Mile, Tadong, Gangtok, Sikkim -737102.

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**Abstract**—The present study was carried out to determine the phytochemical constituents and the physicochemical values according to pharmacopoeial method. Quantitative estimation was done for phenols, flavonoids, Flavonols and tannins. The antioxidant activity was also performed by DPPH (1, 1 diphenyl-2-picryl hydrazyl) radical scavenging method for methanol extract of bark, which showed that methanolic extract of barks of this plant on higher concentration possess better antioxidant property when compared to reference standard ascorbic acid. It shows strong antioxidant DPPH radical scavenging activity with IC<sub>50</sub> value of 29.17 and 125.71µg/ml for ascorbic acid and methanolic bark extract respectively. The absorbance for reducing power was found to be .070 and .099 for ascorbic acid and methanolic extract respectively. Phytochemical investigation revealed the presence of various secondary metabolites such as flavonoids, tannins, phenols, terpenoids, phlobatannins, saponins and carbohydrate in methanol, acetone and aqueous extracts in *Quercus lamellosa* Sm. which could be the reason for its high antioxidant activity.