



# Effect of Forest Fire on Ammonification and Nitrification: A Study under Chir Pine (*Pinus roxburghii*) Forest Areas of Himachal Pradesh

Shubham, Uday Sharma and Arvind Chahal<sup>1</sup>

Department of Soil Science and Water Management, Dr. YSP UHF Nauni, Solan-173 230, India

<sup>1</sup>Office of SMS (Agriculture), Development Block, Chamba-176 310, India

E-mail: shubham73seth@gmail.com

---

**Abstract:** The present study was conducted to evaluate the effect of fires on the ammonification and nitrification rates under different land uses based soil under chir pine forest areas. Ammonification and nitrification rates as influenced by fire under different land use patterns soils were studied in Solan district, Himachal Pradesh. The study revealed that ammonification and nitrification rates varied between the different land uses and seasons. The higher amount of ammonification and nitrification were recorded during rainy period. Ammonification rates were favored more over nitrification in all land uses which would be useful for safeguarding the soil nitrogen for longer periods.

**Keywords:** Ecosystem, Ammonification, Nitrification, Nutrient management, Immobilization

---