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## **An integrated perspective on assessing agricultural air quality**

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**Abstract:** The biogeochemical cycling of trace gases (e.g. nitrogen, sulphur, etc.), and contaminants on local, regional, and global scales is a complex system of emissions, transformations, transport, and deposition. To date, limited, if any, attempt has been made on quantifying and identifying direct emissions of gaseous sulphur compounds from agricultural operations. This represents a major regulatory need for sound and prudent environmental practice. In this paper, we summarise an integrated assessment framework for studying the agricultural air quality issues by discussing the various components of the research, education and outreach involved.

**Keywords:** agricultural air quality; air emissions; air pollution; ammonia; animal feeding operations; biogeochemical cycles; education; hydrogen sulphide; North Carolina; outreach.

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