Physical Research Laboratory

Geosciences Division

Tuesday Seminar

Deciphering the water source utilization and transport by plants using stable isotopes

Abstract

Plants play a major role in global hydrological cycle controlling ecosystem, climate, and natural resources. Water present in plants is mainly transported by a vascular tissue called xylem, which also transports nutrients from the root to the rest of the plants and provide structural support to them. Xylem water also play a major role in plant physiology and plants have the tendency to use different sources of water with respect to its availability. So tracing the isotopic signature of xylem water will provide better insights about utilization of water by plants in a given area. Further, temporal and spatial change in plant species composition and physiology is mainly driven by the climatological settings and hence there is likelihood of differences in water use efficiency and transport mechanism. Considering the above background, in this talk, I will discuss about the importance of stable isotopes in xylem water as a tool to understand water transport in plants.

Speaker: Ms. Ajayeta Rathi
JRF, GSDN

Date	Time	Venue
13-July-2021	16:00 Hrs	(Online)Bluejeans

All are invited to attend and participate in discussion

A. K. Sudheer, Geosciences Division