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Physico-chemical Properties of Soils Underneath Tuberous Medicinal Plants from Sitamata Wildlife Sanctuary

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Abstract: The present paper focus on physico-chemical properties of soil at surface and depth (20-25 cm) beneath three important tuberous medicinal plants, *viz. Arisaema tortuosum* (Wall.) Schott, *Chlorophytum tuberosum* (Roxb.) Baker and *Curculigo orchioides* Gaertn. from the Sitamata Wildlife Sanctuary, Pratapgarh district of Rajasthan. The soil sample were collected to characterize their chemical properties such as soil texture, moisture, pH, EC, organic carbon, nitrogen, and available phosphorus during June-October 2014-2017. The maximum soil moisture was present on surface soil during September in all selected plants. OC and P were maximum during October, whereas N during September at both levels underneath *A. tortuosum*. The N and P were highest during June and October, respectively at both levels underneath *Curculigo orchioides*. Maximum OC and N were observed during August at surface soil whereas P in September beneath *Chlorophytum tuberosum*.

Keywords: Arisaema tortuosum, Chlorophytum tuberosum, Curculigo orchioides, Soil physico-chemical properties