

## **Investigation of Possible Vesicular Arbuscular Mycorrhizal (VAM) Associations in Prevalent Weeds in Tea Cultivations of Uva Region**

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A study was carried out to investigate the possible Vesicular Arbuscular Mycorrhizal (VAM) associations in some prevalent weeds. VAM association in roots of some weeds is said to be favourable for crop growth. Weed root samples from the rhizosphere of *Ageratum conyzoides*, *Axonopus compressus*, *Bidens pilosa*, *Borreria latifolia*, *Cleome rutidosperma*, *Drymaria cordata*, *Eleusine indica*, *Erigeron sumatrensis* and *Oxalis corniculata* were collected from two tea estates, Wewessa and Spring Valley in Uva region covering IM1a agro-ecological zone. Soil samples from the rhizosphere of each weed were collected and tested for soil pH. VAM root colonization percentages and spore counts were calculated using Grid method and Doncaster's counting disc method, respectively. The highest VAM count was recorded as 47.67% with *Axonopus compressus* weed and the lowest as 20% with *Eleusine indica*. The highest spore number was counted as 265 with *Borreria latifolia* and the lowest as 70 with *Axonopus compressus*. The mean pH was within the range of 6.2 to 4.8 at  $19 \pm 1$  °C in two locations.

**Keywords:** Root colonization, Vesicular Arbuscular Mycorrhiza (VAM), Weeds, VAM spore count