



## Variation of Leaf Morphology of Selected Cinnamon Accessions in Two Agroecological Regions of Sri Lanka

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Breeding stable, high quality and high yielding cinnamon varieties is useful for commercial cultivation. The objective of this study was to evaluate the variation of leaf morphology of selected cinnamon accessions in two locations. Twenty vegetatively propagated (VP) high yielding cinnamon accessions collected from Mid Country Research Station (MRS), Dalpitiya in Mid Country Wet Zone (WM2) were established in the Galle district (GD), for assessment in a randomized complete block design with three replicates. Quantitative traits of leaf length (LL), leaf width (LW), and petiole length (PL), and qualitative traits of leaf arrangement (LA), venation (LV), base (LB), margin (LM), apex (LAP), and shape (LS) were recorded. Accession 20 produced the longest PL ( $1.93 \pm 0.67$  cm) and LL ( $14.2 \pm 0.6$  cm), while accession 12 recorded the shortest PL ( $0.92 \pm 0.10$  cm) and LL ( $9.0 \pm 0.5$  cm). LW varied from  $4.43 \pm 0.12$  cm (accession 26) to  $6.00 \pm 0.058$  cm (accession 18). LA and LV exhibited the least environmental influence. LA types of opposite to sub-opposite on different branches and opposite to sub-opposite within the same branch were recorded, with the latter dominating (75%). LV of most accessions (70%) expressed the three- or five-veined pattern. LM showed the strongest environmental response, with 95% of accessions shifting from undulate (MRS) to entire (GD). Leaf shape varied markedly between sites: MRS was dominated by narrowly elliptic and oval types, whereas GD exhibited greater diversity, including several shapes absent at MRS. LAP morphology differed, with MRS showing broader variation, while GD was strongly dominated by the acute type. LB morphology remained relatively uniform, with obtuse, 'contracted into petiole, then shortly cuneate' form most common at both sites. These findings provide a basis for confirming morphological uniformity and developing stable, high performing cinnamon varieties.

**Keywords:** Agroecological regions, *Cinnamomum verum*, Leaf morphological traits