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Variation of *Lasiaspinosa* (L.) Thw. (*kohila*): an underutilized aroid with high potential in Sri Lanka

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Lasiaspinosa (L.)Thw. is considered as a high potential indigenous aroid in Sri Lanka. Though it is rich in medicinal and nutritional properties, *L. spinosa* is not popular among consumers and farmers as other vegetable crops. Though Sri Lankan *Lasia* population shows a wide range of morphological variation, it has not been properly studied and documented. Morphological characterization is considered as the first step prior to in-depth biochemical or molecular studies. Therefore, this study was conducted to assess the diversity of *L. spinosa* found in 18 agro-ecological regions in Sri Lanka. Morphological characters were observed, measured and documented at the field according to a list of descriptors. Selected chemical parameters (moisture content, nitrogen, phosphorous and potassium concentrations and crude fiber concentration) were measured using standard laboratory techniques in both immature leaves and rhizomes at the level of edible/ harvestable stages. A survey was conducted among Ayurvedic practitioners to document medicinal uses of *L. spinosa.* Data were analyzed using hierarchical cluster analysis and univariate procedures. Ninety accessions were collected from Sri Lanka. They were grouped in to four main clusters based on leaf characters (sagittate type, lamina dissected type, mixed form and *kalu-kohila*) and several sub clusters. The study was able to discover a spineless *L. spinosa* type and it was grouped under sagittate type. Apparently *kalu-kohila* could be a rare local form of *L. spinosa* and historical records revealed that it was used in the indigenous medicine. In the chemical analysis nitrogen, potassium, crude fiber and moisture content showed significant differences ($P<0.05$) among four types, but phosphorous concentration was similar in rhizomes. Compared to others, spineless type showed significantly higher values for chemical properties studied. The different uses of *L. spinosa* in ayurvedic medicine were also documented. The spineless type and *kalukohila* can be considered as superior germ plasmin future crop improvement programs.

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