Stenospermation (Araceae) of the Lita-San Lorenzo region, Esmeraldas Province (Ecuador)

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Project Background

The Lita-San Lorenzo Road runs through the most species-rich region in Ecuador. However, the government plans to clear-cut 1 km of forest on either side to widen this road. Many of the aroids found within this area, specifically those in the genus *Stenospermation.,* have yet to be studied. This project, and related studies, aim to document the species of Araceae within this region, many of whom could be completely wiped out by this expansion. As part of a NSF-funded Research Experience for Undergraduates (REU) program, we have constructed a flora and dichotomous key of *Stenospermation* for the Lita-San Lorenzo region of Esmeraldas Province.

Methods

Collections were taken from 1998 to 2005 and combined with herbarium specimens. Specimens were then sorted into species groups and described. Groups with fertile material were given scientific names and those without were assigned unique species numbers. A dichotomous key was created for all species of *Stenospermation* found in the region.

Results and Discussion

32 species of *Stenospermation* were identified in the Lita-San Lorenzo region. Of these:

- 5 are previously published species, found throughout Ecuador or in other countries
- 15 are new species, endemic to the Lita-San Lorenzo region and have been given a scientific name
- 11 are new species, unable to be named because of the lack of fertile material but are instead assigned a unique number

Some of the published species include possibly distinct material, but a further revision of this relatively unstudied genus is needed to confidently classify these as new species.

Acknowledgements

Images, clockwise from top left: Map of the Lita-San Lorenzo region in Esmeraldas province, Ecuador; *S. schwerdtfegerii; S.costatum;* scanned herbarium specimen of *S. grandilaminum.*