

[Review Form 3](#)

Book Name:	<a href="#">Geography, Earth Science and Environment: Research Highlights</a>
Manuscript Number:	Ms_BPR_4046
Title of the Manuscript:	Species of the Poaceae family suitable for Andean livestock farming in the Peruvian Andes reported in GBIF and local studies
Type of the Article	Book chapter

**PART 1:** Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This study is significant to the scientific community as it enhances the understanding of the Poaceae family's role in Andean grassland ecosystems, which are vital for livestock feeding and ecological balance. By combining local research and global biodiversity data, it addresses critical gaps in species identification and spatial distribution, enabling more targeted conservation and management strategies. The findings provide a foundation for ecological niche modeling and sustainable restoration programs, contributing to biodiversity preservation and the resilience of Andean agricultural systems. Furthermore, this research highlights the importance of improving biodiversity databases like GBIF for better representation of under-documented regions.	
Is the title of the article suitable? (If not please suggest an alternative title)	I suggest to revise it to make it more catchy, example "Suitability of Poaceae Family Species for Andean Livestock Farming in the Peruvian Andes: Insights from GBIF and Local Studies"	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	<p>Yes but I suggest to rephrase it. Some sentence are too long and give less emphasis on what the author wants to convey.</p> <p>Andean grassland ecosystems host a mega-diverse floristic composition, with families such as Poaceae, Rosaceae, Asteraceae, Plantaginaceae, Fabaceae, and Cyperaceae among the most significant contributors. These families include species well-suited for feeding Andean livestock such as sheep, cattle, and South American camelids. However, accelerated ecosystem degradation and species extinction highlight the need for better understanding and monitoring of these species' spatio-temporal distribution.</p> <p>To address this, we compiled information on Poaceae species identified as suitable (D species) from theses and published scientific articles. We also analyzed records and spatial distribution data for these species in the Global Biodiversity Information Facility (GBIF) for the Peruvian Sierra region. After curating the data, we generated geo-processed maps that revealed 63 D species across the genera Agrostis, Agropyrum, Bromus, Calamagrostis, Dissanthelium, Festuca, Hordeum, Muhlenbergia, Nassella, Paspalum, Poa, Stipa, Trisetum, and Vulpia. Notably, only 52 of these species are registered in GBIF, with records concentrated in high-tourist areas and regions supported by research projects, such as Huascarán National Park.</p> <p>The limited number of studies on natural grassland species in Peru and the low spatial coverage of GBIF records underscore the need for improved monitoring strategies to support conservation and sustainable livestock farming</p> <p>Suggested keywords: Poaceae species, Andean grasslands, Livestock feeding, Biodiversity monitoring</p>	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically well-written and serves as a solid baseline for subsequent studies related to this topic.	

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Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes, the author cited and presented many references. I suggest including the DOIs for the references.	
Is the language/English quality of the article suitable for scholarly communications?	Yes, but I suggest, the manuscript should be subjected to proofreading to further improve its quality.	
<u>Optional/General</u> comments	Please include some pictures of the <i>Poaceae</i> family species mentioned, and it would also be a valuable addition to present images of the animals consuming these feed resources. Additionally, I have included some comments, suggestions, and edits in the manuscript.	

**PART 2:**

	<u>Reviewer's comment</u>	<u>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</u>
<u>Are there ethical issues in this manuscript?</u>	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

**Reviewer Details:**

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