

Review Form 3

Journal Name:	Asian Journal of Environment & Ecology
Manuscript Number:	Ms_AJEE_121453
Title of the Manuscript:	Evaluation of various turfgrasses for qualitative and quantitative traits in Varanasi region
Type of the Article	

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.		
Is the title of the article suitable? (If not please suggest an alternative title)		
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.		
Are subsections and structure of the manuscript appropriate?		
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>Even with 55 years professional research experience on pasture and turf grasses plus multiple visits to India as a consultant and as a tourist, I found it impossible to make sense of the submitted manuscript and actually see some coherent and worthwhile message emerging.</p> <p>Starting with the Title which needs to be tighter and more informative as to the content of the manuscript. How many turfgrasses, not just various? Varanasi is in India; say so. Why did you take data on quantitative and qualitative traits?</p> <p>Remember that the Abstract should be a stand-alone section, which currently it is not. As with the full text, it does not tell me the names of the grasses studied, starting with their scientific names. What is the purpose of the more esoteric calculations (heritability, genetic advance) when I cannot even understand how the authors got there; and are they even applicable or serve any useful purpose in terms of information?</p> <p>The Introduction is grandiose in the sweep and extent of its coverage, but in the end the background to the problem and what was done are largely lost among all of the many references, mostly irrelevant, that are thrown in. The Introduction could be substantially reduced to just two short paragraphs, the first clearly and succinctly introducing the problem (why was the research undertaken) and the second introducing how the problem was tackled (the principles behind what was done). Getting the supporting bibliography in your References right is also very important: for example, Roberts et al. (1992) covers pp. 1-17 in the ASA Agronomy Monograph 32 which in total has 805 (+ xxi) pages, not 775 as listed in the bibliography.</p> <p>The purpose of the Materials and Methods section is, firstly, to provide enough information for others to be able to repeat the experiment(s) being reported; and, secondly, to enable editors, referees/reviewers and ultimately readers to make informed judgments about the conduct of the experiments and on the results and conclusions presented. Fundamental to achieving the required outcome is to define accurately the plant and other materials used in experiments and to define clearly how the experiments were managed and the basis of the measurements taken. But finally, 2 1/2 pages into the manuscript, we do learn at last where Varanasi is located (i.e. India), though the 2 decimal places of precision shown in the altitude (masl) is laughable.</p> <p>From the information provided, I can see the identity of only 4 of the 11 genotypes studied: bermudagrass, Manilagrass, bahiagrass and centipedegrass. I can take an educated guess at two more (crowsfoot, 'Tifway' [?] hybrid bermudagrass) and find another two possibilities ('Bargusto', 'Panama' seeded bermudagrasses) with the help of Dr Google (which no reader is going to waste time going to). But the last 3 are just mystic and I wouldn't have a clue what has been used. Start with scientific names and authorities (check these through the International Plant Names Index and other online sources like Kew Plants of the World and Tropicos) before resorting to common names; and show cultivar names within single quotation marks as required under the Cultivated Plant Code. The authors have used just one scientific name and in that the authority shown is wrong (see below).</p> <p>Cynodon dactylon (L.) Pers. (bermudagrass) - one undefined genotype - 'Bargusto', a seeded cultivar from Barenbrug</p> <p>- 'Panama', another seeded cultivar from Barenbrug Cynodon dactylon (L.) Pers. X C. transvaalensis Burt Davy (hybrid bermudagrass) - 'Tifway', sometimes erroneously called Tifway 419 in colloquial use because the breeder's code was Tifton 419. 'Tifdwarf' (note the spelling, not Tiftdwarf) is a greens grass with very thin stolons, so based on the stolon diameters given in Table 3 I am guessing that 'Tifway' was used</p> <p>Eremochloa ophiuroides (Munro) Hack. (centipedegrass). What was the natural source or the cultivar used? Eleusine indica (L.) Gaertn. (crowsfoot grass), but this is one of the worst annual grass weeds of turf (and crops more widely) in the tropics and subtropics. Why would anyone even look at this species for turf use let alone include it as a treatment?</p>	

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	<p>Paspalum notatum Flüggé (bahiagrass). What was the natural source or the cultivar used? Zoysia matrella (L.) Merr. (Manilagrass). What was the natural source or the cultivar used? Assuming that my educated guesses are correct, this leaves 3 genotypes that I cannot work out at all: <input type="checkbox"/> Palma grass (never heard of it or anything like it) <input type="checkbox"/> Tanu Variant grass (is this an Indian strain of C. dactylon from the far north-east in Arunachal Pradesh where the Tanu people come from? If not, what is it?) <input type="checkbox"/> Local grass (is this a single species or a mixture of species? C. dactylon in India and around Varanasi is more erect than in other countries but not as thick in the stolon as Table 3 indicates)</p> <p>The methodology is poorly documented. For example, planting was by dibbling, making small holes in the ground. But was seed or vegetative material used? Hybrid bermudagrasses do not set seed, so must be vegetatively planted, and Manilagrass and centipedegrass were probably planted similarly. But with some of the other entries, seeds may have been used The manuscript is silent on this point. Comparative measurements must be based on comparing like with like, and all of these must be clearly defined. For example, dry weights require something like 60-70°C, not just hot air. Stolon internode length and diameter measurements should be taken from mature internodes before the attached leaves (also measured?) reach the stage of senescence, typically 4 or 5 visible nodes back from the tip of the stolon; internode 3 in my experience is likely still developing. But when I see stolon internode measurements in Table 3 for crowsfoot on which I've never seen a stolon and on the "erect" local grass, I am left wondering whether the authors really know what a stolon (an above ground stem that creeps along the ground surface) actually is.</p> <p>Except for very simple studies with few data to present, it is preferable to keep the Results (presenting the data) and the Discussion (formulating and explaining the message that came out of the data presented, plus any conclusions) sections separate. By that stage, however, the submitted manuscript was already a lost cause, so with more of the same uncertainties to deal with I did not waste time looking at these parts in detail.</p> <p>In summary, the submitted manuscript is fundamentally flawed well past the point of still being salvageable. The grasses studied and the methodology used range from incorrectly defined through ill-defined (or poorly defined) to undefined.</p>	
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PART 2:

	Reviewer's comment	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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