Review Form 1.6

Journal Name:	**International Journal of Environment and Climate Change**
Manuscript Number:	**Ms_IJECC_92795**
Title of the Manuscript:	**CHARACTER ASSOCIATION AND PATH-COEFFICIENT ANALYSIS FOR KERNEL YIELD AND ITS ATRIBUTING TRAITS IN MAIZE (Zea mays L.)**
Type of the Article	**Original Research 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.
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PART 1: Review Comments

	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)*
Compulsory REVISION comments		
Minor REVISION comments		
Optional/General comments	Author well formulated the research. Now days maize is gaining importance due to its multifarious uses. Maize is known as the "Queen of Cereals" around the world because it has the highest genetic production potential of all cereals (Kumari *et al*, 2016). It is the only cultivated species in the Maydeae tribe of the Poaceae family with greater economic value, and it plays a critical role in global food and nutritional security. Being a C4 plant, it is physiologically more efficient, yields more grain, and adapts to a wider range of environments. Maize is expected to overtake rice as the world's most important grain by 2030, owing to rising demand for dairy and meat products in developing countries and declining rice production in China and India . Yield is a complex quantitative trait, often referred to as 'super character' considerably affected by environment and various yield components. Therefore, selection of genotypes based on yield is not effective. A thorough understanding of the interaction of characters among themselves had been of great use in plant breeding. The efficiency of selection for yield mainly depends on the direction and magnitude of association between yield and its component characters and also among themselves. However, if the correlation is mainly due to the indirect effect of the character through other component traits, the breeder has to select for the particular character through which the indirect effect is expected to improve yield. Thus, correlation coefficients are also useful if an indirect selection of a secondary trait is to be used for improving the primary trait of interest. Path coefficient analysis has been widely used in crop breeding to determine the nature of relationships between grain yield (response variable) and its contributing components (predictor variables), and to identify those components with significant effect on yield for potential use as selection criteria. The major advantage of path analysis is that it permits the partitioning of the correlation coefficient into two components. One component being the path coefficient that measure the direct effect of a predictor variable upon its response variable; the second component being the indirect effect (s) of a	

Comment [G1]: .,

	predictor variable on the response variable through another predictor variable. Well compilation of data and excellent presentation. Since it is one-year research data, need to conduct the one more year research for validation of data. Article is accepted for publication as research note/short note.	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

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