Review Form 1.7

Journal Name:	**Asian Journal of Soil Science and Plant Nutrition**
Manuscript Number:	**Ms_AJSSPN_112899**
Title of the Manuscript:	**Influence of Nitrogen and Phosphorus Fertilizers on Bulb Yield and Yield-related Attributes of Onion (Allium cepa L.) in Fogera Area, Northwest Ethiopia**
Type of the Article	**Original Research Article**

Review Form 1.7

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 1. **Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) 2. **Is the title of the article suitable?** (If not please suggest an alternative title) 3. **Is the abstract of the article comprehensive?** 4. **Are subsections and structure of the manuscript appropriate?** 5. **Do you think the manuscript is scientifically correct?** 6. **Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**It's manuscript important for scientific and farmers of onion.** **No comment.** In abstract authors will reorganize methodology about my comment. No comment. Yes, manuscript is scientifically correct. References are sufficient but references recent (>2010) are 12/33= 36,36%. It's good to have 60% to 80% references recent > 2010.	
Minor REVISION comments 1. **Is language/English quality of the article suitable for scholarly communications?**	Author will read more to correct about my comment and others mistakes.	
Optional/General comments	Comments are to improve scientific research for this original paper. Article is very good for development. **Asbtract**: **Form comment:** **Comment 1: Put this part in section of methodology if it's not the journal rule** Part : ***"Study Design:*** *Randomized Complete Block Design in Factorial Arrangement with three replications.* ***Place and Duration of the study:*** *The research was conducted in 2020 and 2021 in the Fogera area of Northwest Ethiopia."* 1. **Introduction** **Background comment :** **Comment 2: I don't see sentence verb in this expression.** **«** Accordingly, growers, merchants, consumers, intermediaries, and transporters highly benefit from onion production in the area." **Comment 3: In this paragraph it's good for you to explain fertilization of N and P. You not need to introduce pest and diseases, because you are not investigated effect of pest and diseases on bulb yield in this paper. This information is in the first paragraph:**	

	"In the Fogera area, which is located in the South Gondar Zone, Northwest Ethiopia, small-scale onion production in the dry season under irrigation is the most common and is the major source of onion for the local market in the surrounding towns. Accordingly, growers, merchants, consumers, intermediaries, and transporters highly benefit from onion production in the area. However, the production and productivity of the crop in this area is constrained by diseases, pests, and suboptimal fertilization. Adequate management of mineral nutrition is a determining factor for high yield and profitability of the crop. Currently, there are no location-specific N and P fertilizer recommendations for onion production in the Fogera area. Therefore, this study was conducted to determine the response of onion to the application of N and P fertilizers and determine the optimum economic rate of N and P fertilizers to maximize the productivity of onion under irrigation in the Fogera area." **2. Methodology** **Background comment** **Comment 4 : In this section add cultivate of onion situation in your study area. How farmers or someone pratrice onion cultivate. You can add a related plant cultivated in this area.** **"2.1 Description of the study area** The study was conducted at the Fogera National Rice Research and Training Center (FNRRTC) research station from December 2019 to April 2020 and from November 2020 to April 2021 during the dry season under irrigation. FNRRTC is located in the Fogera District of the South Gondar Zone, Northwest Ethiopia. It is situated at 11^{o} 54' 22.84''N latitude and 37^{o} 41' 9.97''E longitude at an altitude of 1806.4 above sea level (masl) (Figure 1). Fogera district is located between latitude 11°49'55'' N and longitude 37° 37′ 40'' E, with altitudinal ranges of 1774 and 2415 masl. The dominant soil type in the study area is Pellic Vertisols." **Comment 5: What is the meaning of "*Weinadega*" ?** **2.2 Climate** The study area lies in a tropical monsoon climate, where the rainfall is dominated by the Intertropical Convergence Zone (ITCZ). The climate of the study area is locally classified as *Weinadega*. Rainfall in the area is uni-modal, usually occurring from June to September (Figure 2), and its average annual total rainfall is 1363.7 mm (with 90% falling from June to September). The mean minimum and maximum temperature of the study area are 12.7 and 27.4°C, respectively with the lowest occurring in December and January and the highest in Feb to May (Data obtained from Woreta Metrological Station). **3. RESULTS AND DISCUSSION** **Form comment:** **Comment 6: Put meaning of "CV (%) and LSD (5%)" in legend of table 2 and table 3:** **"Note**: PH: Plant height (cm); LN: Leaf number per plant; BD: Bulb diameter (cm). *Treatments within a column followed by the same letter are not significantly different at 5% probability level. NS: Non-significant at the 5% significance level".	

	Background comment **Comment 7: You must introduce unmarketable negative effect on bulb yield of onion. How money can lost with unmarketable bulb yield?** **"3.5 Partial budget analysis** The partial budget analysis indicated that the highest net economic return of Ethiopian Birr (Birr) 230,252.2 was obtained from the application of N_{138} followed by the net economic return of Birr 210,542.1, which was obtained from the application of N_{92} (Table 4). There was a rate of return of 137.0 and 244.5 birr for every birr invested on onion production by application of 138 and 92 kg N ha^{-1}, respectively. The result is supported by the findings of [24] who found out application of 150 kg N ha^{-1} as an economic optimum rate of N fertilizer for onion production." It's original paper for scientific and farmers of onion (Allium cepa L.). Article is very good for development. Author will follow well structure article in abstract. Introduction will show problem to resolve and justification of study. Study area will be very clear for readers to know the condition and situation crop of onion and appreciate the results. Conclusion is not abstract, that the implication of the result in development.	

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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