

Editor’s Comment:

Please find enclosed file of reviewed MS of [AJSSPN 37538.](#)

PART 1: Review Comments

	Reviewer’s comment The main concern of this paper should be focused on the application composted algae or dried algae to (1) increase the N fertilizers efficiency of N or to reduce the use of inorganic fertilizers, (2) improve the soil fertility of Ultisol and (3) to enhance the yield of Amaranthus.	Author’s comment <i>(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)</i>
Compulsory REVISION comments	The title should change to Effect of Dried Algae And N Fertilizers to Soil Chemical Properties and the Yield of Amaranthus (<i>Amaranthus Cruentus</i>) on Ultisols Southeastern Nigeria ABSTRACT Need to be refined systematically, concisely, and sharply: See suggestion below (The detail information of location presented in Materials and Method A pot experiment to investigate the effects of dried algae and N fertilizers on the chemical properties and the yield of Amarathus was conducted from to in Green House on <u>Ultisols</u>. The experiment was arranged as a Complete Randomized Design (CRD) with factorial pattern, consisted of two factors and provided with three replications. The first factor was the application of dried algae (0, 1, 2, 3 and 4 t/ha) and N fertilizers (0, 40, 80 and 120kg/ha). The observed of chemical soils properties were The experimental results revealed that Simplified the presentation obtained results: Interaction effect on observed responds. If there is no interaction continue to the simple effect. (effect of dried algae application or N fertilizers). The last sentence of this abstract should be the main conclusion and recommendation. (What is the best or recommended dosage of dried algae and N fertilizers) or dosage of dried algae within the N fertilizers dosage INTRODUCTION Please described briefly also the significant role of Ultisols in Nigeria? or its potential for agriculture and its constraints. So, the there is a clear relation with the treatment (algae as organic manure or organic ameliorant) Just refining the sentence Line 57: The study deals with interaction effect because the experiment was set up as 2 factor experiment (factorial), and not as the single factor of the combination of algae and N fertilizers (20 treatments) MATERIALS AND METHOD Need to be rearranged and rewritten systematically : The soils properties (Table 1) and Characteristic of algae (Table 2) are belong to the materials of research. Suggestion see below The study to investigate was carried from to..... in Green House condition in Michael Okpara University of Agriculture Umudike, Abia State Nigeria, latitude 5°29’N and longitude 7°35E, elevation is about 122m above sea	

Commented [TS1]: The detail location presented in Material and method



	level with mean annual rainfall of about 2163mm, mean daily temperature range of 35⁰c to 20⁰c and a relative humidity of about 72% (Odurukwe <i>et al.</i>, 1995). The soil used for the study was an Ultisols from the teaching and research farm of the university and has been classified as Herisol (FAO/UNESCO, Haplic 1958). Physicochemical Characteristics of the Soils is presented in Table 1 (Please move the table 1 to this section, the properties of soil used belong to material methods). Soil samples were collected with the soil auger from 0-20cm depth, air dried, sieved with 2 mm sieve, after which sub-samples of 5 kg each were weighed into 12 L capacity plastic buckets perforated at the bottom to allow for air and water movement. The algae Amendment Collection and Preparation (as green manure or composted algae) The algae used in the study were collected from the irrigation path around the university research and farm and other fresh water habitats around the study area and these were air dried (how long), ground and weighed out for application. The characteristics of the Algae used is presented in Table 2 (Move table 2 to here) and describe shortly the main properties Pot Experiment The experiment was set up as randomized completely design with factorial pattern, consisted of two factor and provided with three replications. The first factor was application dried algae, comprised five rates (0, 1, 2, 3 and 4t/ha) algae, while N fertilizer was set up as the second factor, consisted of four rates ((0, 40, 80 and 120 kg/ha, please convert to N). Five kg of air dried, sieved with 2 mm sieve were weighed into 12 L capacity plastic buckets perforated at the bottom to allow for air and water movement. Subsequently, appropriate weights of algae and N fertilizers were taken and mixed thoroughly with the soils. The amended soils were incubated for four weeks with adequate watering at field capacity to keep the soils moist for microbial decomposition of the algae to release its nutrient content.). The amaranthus seeds were sown in drills using river sands after the incubation period and thinned to one seedling per bucket after three days of germination. The buckets were kept at about field moisture capacity throughout the green house study according to the method described by Whitehead and Hood (1965). Please continue ... RESULTS AND DISCUSSION Need to be rewritten and reanalyzed as required by 2 factor experiment Please presented the interaction effect on observed respond and simple effect on the measured parameters separately	
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Commented [TS2]: Use the USDA taxonomy (Subgroup)

Please proceed the analyses as required by factorialized randomized complete design, and pay attention first on the interaction. If you presented become 20 treatments, the experiment become single factor (to test the significant different between the mean value of treatments you may use Scott Knott Test (the treatments more than 10 treatments, use LSD if less than six treatments). Please follow suggestion below

Effect of Algae and Urea on Yield of Amaranthus

Please proceed the analyses according to factorial methods to make it



easier in discussion or to take the conclusion. Please use significant notification. If The effect of interaction is significant, please presented the data in two ways table. You may follow the suggestion below:

Table : Effect of and on,

N-Fertilizers (kg ha ⁻¹)	Dried Algae Rate (kg ha ⁻¹)				
	a0=0	a1 = 1	a2 = 2	a3=3	a4= 4
0	XXX a A	XXX a A	XXX a A	Xxx b A	Xxx ab A
40	XXX a B	XXX ab B	XXX ab B	XXX b B	XXX b B
60	XXX a B	XXX ab B	XXX b B	XXX b AB	XXX b B
120	XXX b B	XXX a AB	XXX b B	XXX b B	XXX b A

Notification: Mean value follow by the letter within the column (capital) and the row (small) are different significantly (LSD.0.5)

If the interaction effect is not significant, please proceed the simple effect

Table: effect of dried algae as organic ameliorant on

Dried Alga	Observed parameters		
a0= control	pH	Av P	Etc.
a1 = 1 ton ha ⁻¹	Xx a	xx a	Xx b
a2= 2 ha ⁻¹	xx	xx	xx
a3 =3 ha ⁻¹	xx	xx	xx
a4 = 4 ha ⁻¹	xx	xx	xx
Dosage of N Fertilizers			



	Notification: Mean value follow by the same letter are not different significantly (LSD. 0.5) Make adjustment to discussion CONCLUSSION Make an adjustment according to the reanalysed and discussed data	
Minor REVISION comments	-	
Optional/General comments	-	

Editor's Details:

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