ATOM INDONESIA JOURNAL
Editor's Report

Article No. : #418

Title of Paper : The Utilization of Microbial Inoculants Based on Irradiated- Compost on Dryland Remediation to Increase The Growth of King Grass and Maize.

Referee Name :

Comment on Descriptions

1. Title

[ ] Appropriate
[X] Should be changed

2. Abstract

Yes[X] No[ ] Is the length reasonable?
Yes[ ] No[ ] Is it an appropriate summary of the content?

3. Main Text

Yes[X] No[ ] Is there anything new in this work?
Yes[X] No[ ] Is the relation to previous studies adequately stated?
Yes[ ] No[X] Are the assumption(s) and/or method(s) described comprehensively?
Yes[X] No[ ] Are the new results adequately emphasized?

Line #	Referee's Comments
	The introduction section should be rewritten by providing current references
	The title is suggested to be changed to "The Utilization of Irradiated-Compost Based Microbial Inoculants on Dryland Remediation to Increase The Growth of King Grass and Maize"
	Table 1 - Table 6. Change ... 5,95 to 5.95 etc.
	Results and discussion section should be explained more comprehensively. Each parameter should be discussed properly, especially the analysis of the data using ANOVA and Ducan's test .
	This manuscript requires additional works in term of organization, context and grammatical errors.
	The references should be written as the format template for Atom Indonesia. Please refer to the instruction to authors. All Indonesian references should be translated into English. It would be much better if the author could add up more references by providing current references published within 5 years.

Final comments and recommendations:

This manuscript requires additional works.

This paper is recommended to be

[ ] Accepted without further revision
[ ] Accepted with minor revision
[X] Major Revision is required
[ ] Rejected

ATOM INDONESIA JOURNAL
2nd Editor's Report

Article No. : #418

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Yes[X] No[ ] Are the new results adequately emphasized?

Line #	Referee's Comments
239-240	.....environment that is rich in nutrients~~, required~~ carrier sterilization is required [12].
225	....25 kGy ~~of capable~~ is able to clean....
244	..... ~~In~~ ~~the~~ The sterilization .....
245	...., ~~no~~ does not changes ~~in~~ the .....
254-258	The dryland of teak forest at Persil 3 Ngasem district , Bojonegoro has a neutral pH (6.6 to 7.5) , moderate organic- C (2-3 %) , high N (0 .51 to 2560.75) , low C / N ~~is very low~~ (< 5) andlow P_2O_5 ~~is very low~~ (< 4 ppm P) . ~~In~~ According to these criteria .....
259-261	~~available~~ very low P (P_2O_5) very low suspected to be associated with the less optimal of carrying capacity of the land ~~less than optimal~~ for crop growth and yield.
263	microbial inoculants ~~is~~ was expected ~~capable~~ to be able to improve
265	solubulizing bacteria [8]. (need conjunction) Availability of phosphate
268-269	remediation ~~application~~ applied on dry land ~~uses~~ of maize (*Zea mays*).
275-282	traditional oil explorationn sites (Cepu) has a slightly alkaline pH criteria (7.6 to 8.5) , high organic - C ~~is very high~~ (> 5 %) , low N (0.1-0.2 %) , high C/ N ratio ~~is very high~~ (> 25) and low P_2O_5 ~~is very low~~ (< 4 ppm P) . Characteristics of these physicochemical properties suspected to be associated with spills or contamination of oil sludge in the ground . A this ~~This~~ condition ~~required~~ requires .....
290	second stagewas through
300	consortia inoculant to ~~enhancing~~ enhance the growth and yield of ...
303-310	bio-organic fertilizer that ~~consisted~~ consist of 80 % manure, 16 % cattle feed residual straw and 4 % dolomite. The obtained bio -organic fertilizer ~~(PBO)~~ has appropriate quality parameters according to ~~The~~ the regulation of Agricultural Ministry No. 28 / Permentan / SR.130 / S / 2009 on the minimum technical requirements of organic fertilizers such as shown in Table 3.

342	teak (site II) shows better results ~~better~~ than the control
360	.... on the dryland. It is
366	..... By that (uncommon conjunction)
429-430	... C/N ratio, ~~. And~~ and TPH had significant difference (P<0.05), whereas organic matter, N total, and pH had no ~~signifant~~ significant ~~differenceas~~ differences (P>0.05) ~~from~~ between the treatment obtained by plot A and plot B as shown in Table 6. The *in-situ* composting for 60 days can reduce the content of TPH (Total Petroleum hydrocarbons) from 105 g/kg to 44 g/kg (58.10 %). The *in-situ* composting and King grass planting for 120 days was ~~capable~~ able to reduce the content of TPH from 105 g/kg to 24 g /kg (76,75%). On the other hand, the *in-situ* composting and King grass planting for 120 days enriched by plant growth promoting- functional microbial inoculants can decrease TPH content from 105 g/kg to 19 g/kg (82,23 %). The results indicate that hydrocarbon degrading- functional - microbial inoculants and plant growth promoting- functional microbial inoculants are suitable to use on dryland remediation of oil sludge contaminated soil by using *in-situ* composting and landfarming methods [11]. The results indicate that .. (repetition, use conjunction)
433	~~dryland~~ productive functions
465	based microbial inoculants containsed of plant growth
477-478	at Kedewan, Cepu-Blora and ~~village~~ local government of Ngasem,

Final comments and recommendations:

Minor revision

This paper is recommended to be

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[ ] Major Revision is required
[ ] Rejected