

**LEMBAR  
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW  
KARYA ILMIAH : JURNAL ILMIAH**

Judul Karya Ilmiah : **Effects of Various Planting Media on Growth Performance of Melon Plants Grafted With Squash Rootstock**

Jumlah Penulis : 3 Orang

Status Pengusul : Penulis Kedua

Identitas Jurnal :

- a. Nama Jurnal : International Journal Of Scientific & Technology Research
- b. ISSN : 2277-8616
- c. Vol. No. Bulan, Thn. : Vol. 9 No. 4 April 2020
- d. Halaman/Penerbit : 2930-2934 / IJSTR
- e. DOI Artikel (Jika Ada) : -
- f. Repository/Web : <http://www.ijstr.org/final-print/apr2020>

Terindeks di : Scopus, Semantic Scholar, Google Scholar, Scribd

Kategori Publikasi Karya Ilmiah :  Jurnal Ilmiah Internasional / Internasional Bereputasi  
 (beri ✓ pada kategori yang tepat)  Jurnal Ilmiah Nasional Terakreditasi  
 Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional/ Int. Bereputasi	Nasional Terakreditasi	Nasional Tidak Terakreditasi	
	40	<input type="text"/>	<input type="text"/>	
a. Kelengkapan Unsur Isi Artikel (10%)	4			4
b. Ruang Lingkup & Kedalaman Pembahasan (30%)	12			12
c. Kecukupan & Kemutakhiran Data/Informasi & Metodologi (30%)	12			12
d. Kelengkapan Unsur & Kualitas Terbitan/Jurnal (30%)	12			12
<b>Total = (100%)</b>	<b>40</b>			<b>40</b>

**CATATAN PENILAIAN ARTIKEL OLEH REVIEWER:**

1. Tentang Kelengkapan dan Kesesuaian Unsur :

Artikel ini cukup menarik : lengkap & sesuai

2. Tentang Ruang Lingkup dan Kedalaman Pembahasan :

Ruang lingkup artikel sangat baik

3. Kecukupan & Kemutakhiran Data/Informasi & Metodologi :

Pemakaian data lengkap & metodologi sangat baik.

4. Kelengkapan Unsur & Kualitas Terbitan/Jurnal :

5. Indikasi Plagiasi :

Temapan artikel tidak menunjukkan adanya plagiasi.

6. Kesesuaian Bidang Ilmu :

Muat artikel sdh sesuai dg bid. ilmu

Reviewer 1,



**Dr. Ir. Anggraeni, M.Si**

NIK/NIDN : 0006076301

Unit Kerja : Universitas Djuanda

Jabatan Akademik :

Bidang Ilmu :

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- Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional/ Int. Bereputasi	Nasional Terakreditasi	Nasional Tidak Terakreditasi	
	40	<input type="text"/>	<input type="text"/>	
a. Kelengkapan Unsur Isi Artikel (10%)	4			4
b. Ruang Lingkup & Kedalaman Pembahasan (30%)	12			10
c. Kecukupan & Kemutakhiran Data/Informasi & Metodologi (30%)	12			10
d. Kelengkapan Unsur & Kualitas Terbitan/Jurnal (30%)	12			8
<b>Total = (100%)</b>	<b>40</b>			<b>32</b>

**CATATAN PENILAIAN ARTIKEL OLEH REVIEWER:**

1. Tentang Kelengkapan dan Kesesuaian Unsur :

*kelengkapan & kesesuaian unsur baik*

2. Tentang Ruang Lingkup dan Kedalaman Pembahasan :

*ruang lingkup sesuai & kedalaman baik*

3. Kecukupan & Kemutakhiran Data/Informasi & Metodologi :

*data & metodologi baik*

4. Kelengkapan Unsur & Kualitas Terbitan/Jurnal :

*Discontinued in Scopus as of 2020*

5. Indikasi Plagiasi :

6. Kesesuaian Bidang Ilmu :

*semi bidag' ilmu*

Reviewer 2,



**Dr. Ir. Deden Sudrajat, M.Si**

NIK/NIDN : 0004096501

Unit Kerja : Universitas Djuanda

Jabatan Akademik :

Bidang Ilmu :

**LEMBAR  
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- Jurnal Ilmiah Nasional Terakreditasi
- Jurnal Ilmiah Nasional Tidak Terakreditasi

Hasil Penilaian *Peer Review* :

<b>Nilai Jurnal Ilmiah</b>		
<b>Peer Review 1</b>	<b>Peer Review 2</b>	<b>Nilai Rata-Rata</b>
40	32	36
<p><b><u>KESIMPULAN:</u></b>            Nilai Karya Ilmiah Yang Diusulkan Ke Kopertis Wilayah IV Adalah : 36</p>		

following paper aims to provide information for users who might want to replicate the designed EMG sensors for research purposes.

[\[View Full Paper\]](#) [\[Download\]](#) **2919-2921**  
[\[References\]](#)

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### **A Comparative Study Of Inclusive Education System In Government And Private Universities Of Lucknow City**

Jaya Yadav, Guide Dr. Mitima Sachdeva, Co Guide Dr. Roli Rai

In this paper, we study about a comparative study of inclusive education system in Government & private universities of Lucknow city. Specially study of Lucknow cities these concepts related to Private & Government education and inclusive education in front of challenges in private and government sector. Higher education department face the problems of various challenges of higher education. In these Universities teachers & students face lots of problems.

[\[View Full Paper\]](#) [\[Download\]](#) **2922-2924**  
[\[References\]](#)

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### **Early Detection Of Labor By Monitoring Antenatal Distinctiveness By PH Device**

S.Sathish1, S.Vinurajkumar2, S.Ramkumar3, S.Lakshmi4

Technology has many significances but still pregnancy has its own snag for women. There are substantial proposal arises in time to reduce the exertion by monitoring pre-labor changes in women which benefits the pregnancies to a lower risk both for mother and the baby. In India, for every five minutes, at least one Indian woman dies during pregnancy and child birth which includes early delivery complications. At present, clinical investigations are carried out at regular intervals to observe physical obstruction in pregnancy women. In this paper, significant sign parameters are monitored by a health care device regularly in trimesters to detect early labor. This non-invasive device is incorporated with piezoelectric crystal. To measure fetal movement, cervical dilation, progressive uterine contraction of pregnant women Also amniotic sac ruptures can be noted in monitoring and enables to illustrate Fetal heart rate (FHR), Intra uterine Pressure (IUP) which provides a non panic environment to pregnancy women.

[\[View Full Paper\]](#) [\[Download\]](#) **2925-2929**  
[\[References\]](#)

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### **Effects Of Various Planting Media On Growth Performance Of Melon Plants Grafted With Squash Rootstock**

Yusup Bahrul Ulum, Arifah Rahayu, Yanyan Mulyaningsih

Java region, excluding West Java, is a production center of melon (*Cucumis melo* L.). Efforts including the application of grafting method should be done in order to make the plant grow well in West Java region. Squash (*Cucurbita maxima*) is an appropriate plant to be used as rootstock for melon grafting as squash has a close kinship with melon and grows well in West Java region. Planting medium composition is known to have significant effects on the growth of melon plants. This study was aimed at assessing the combination effects of squash accession as rootstock and various planting media on the growth of grafted melon plants. A factorial completely randomized design with two factors was used. The first factor was planting media compositions including 100% soil (control), 25% compost + 75% soil, 50% compost + 50% soil, 25% rice husk charcoal + 75% soil, and 50% rice husk charcoal + 50% soil. The second factor was squash accessions as rootstock including Bogor, Cianjur, and Sukabumi accessions. Grafting was conducted by using slanting technique. Results showed that the use of Sukabumi accession rootstock resulted in more successful grafting, higher rootstock diameter, plant height, number of leaves, number of internodes, and leaf area than that of Bogor and Cianjur accessions. Compared to the use of rice husk charcoal, the use of compost in planting media resulted in plants with higher diameter of rootstock, plant height, number of leaves, number of internodes, and leaf area.

[\[View Full Paper\]](#) [\[Download\]](#)  
[\[References\]](#)

2930-  
2934

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### **Diction Choice And Stylistic Editing In The Translation Of Rapunzel Texts: An Intralingual Translation Study**

Maimunah Ritonga, Muhammad Yusuf

The aims of this study are to describe the use of diction and stylistic editing in translation of Rapunzel texts. The method used in this study is descriptive qualitative method. The data sources are fairytale Rapunzel by Jacob and Wilhelm Grimm, *Kinder- und Hausmärchen* (Children's and Household Tales -- Grimms' Fairy Tales), 1st ed. (Berlin, 1812), volume 1, no. 12 (Source Text=ST), and Jacob and Wilhelm Grimm, *Kinder- und Hausmärchen* (Children's and Household Tales -- Grimms' Fairy Tales), 7th ed. (Berlin, 1857), no. 12 (Target Text=TT). The data are all of the Rapunzel texts by Jacob and Wilhelm comprising of 45 data in sentences. The result reveals that the translator uses common diction 17 data (37.78%), synonym diction 13 data (28.88%), denotation diction 7 data (15.56%), specially diction 3 data (6.67%), and ST=TT 5 data (11.11%). Meanwhile, in the form of stylistic editing use, it shows that use of smoothing in subject + verb 27 data (60%). The use of tailoring in vocabulary changing is 8 data (17,78%), and in structure sentence changing is 5 data (11.11%). Meanwhile 5 data (11.11%) are translated in the form of ST=TT. It is concluded that the use of smoothing is more dominantly employed by translators.

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2935-



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# International Journal of Scientific and Technology Research

Discontinued in Scopus as of 2020

#### COUNTRY

India



Universities and research institutions in India

#### SUBJECT AREA AND CATEGORY

Business, Management and Accounting  
Management of Technology and Innovation

Engineering  
Engineering (miscellaneous)

Social Sciences  
Development

#### PUBLISHER

International Journal of Scientific and Technology Research

### SCI/SCIE Journal

#### SCI Expanded Journals

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#### PUBLICATION TYPE

Journals

#### ISSN

22778616

#### COVERAGE

2018-2020

CHARLES & KEITH


FALL WINTER 2021





SCOPE

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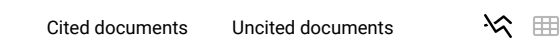
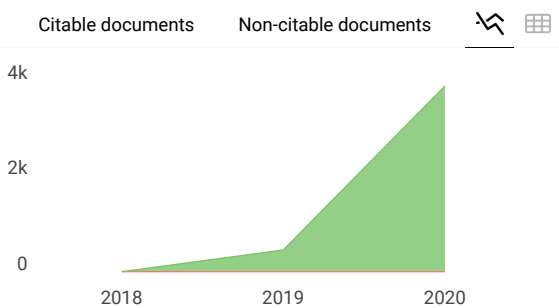
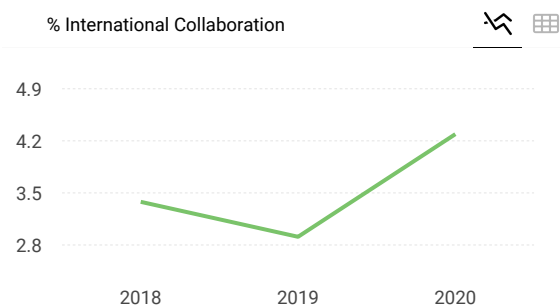
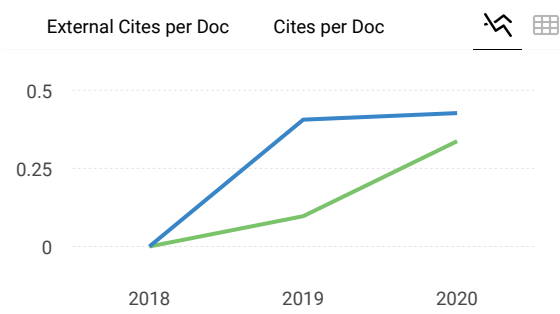
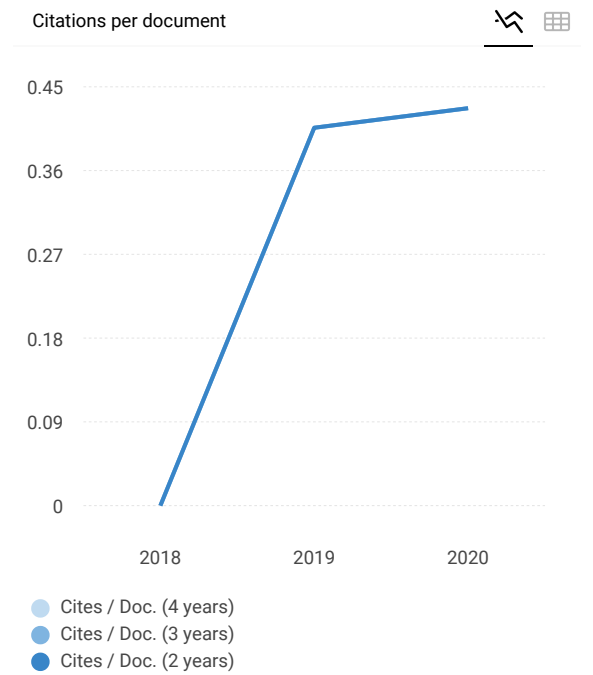
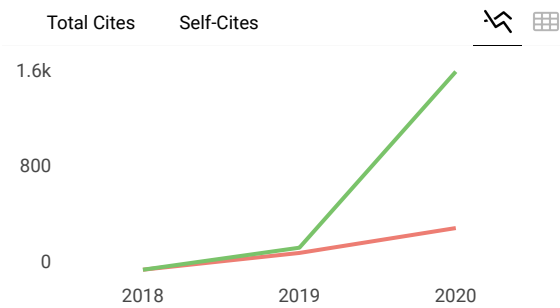
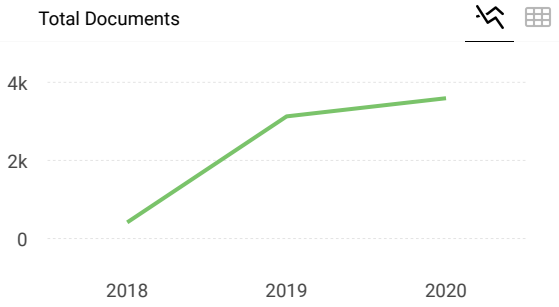
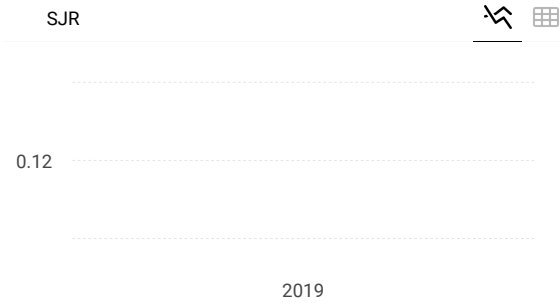
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International Journal of Scientific and Technology Research

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SJR 2020

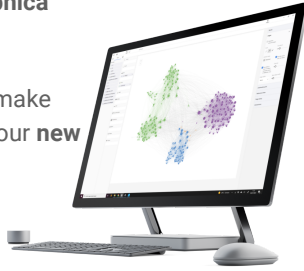
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**O OKEY EDITH N.** 6 months ago

Please do you publish papers on HPLC method development for drug analysis in wastewater?

reply



**Melanie Ortiz** 6 months ago

SCImago Team

Dear Edith,  
 Thank you for contacting us.  
 We are sorry to tell you that SCImago Journal & Country Rank is not a journal. SJR is a portal with scientometric indicators of journals indexed in Elsevier/Scopus.  
 Unfortunately, we cannot help you with your request, we suggest you visit the journal's homepage (See submission/author guidelines) or contact the journal's editorial staff , so they could inform you more deeply.  
 Best Regards, SCImago Team

**S Sheikh** 10 months ago

Just short and brief. my paper has already been accepted for this journal. Is it still in Scopus or discontinued?

Thank you

reply



**Melanie Ortiz** 10 months ago

SCImago Team

Dear Sheikh,

Thank you very much for your comment.

All the metadata have been provided by Scopus /Elsevier in their last update sent to SCImago, including the Coverage's period data. The SJR for 2019 was released on 11 June 2020. We suggest you consult the Scopus database directly to see the current index status as SJR is a static image of Scopus, which is changing every day.

For further information, please contact Scopus support:

[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)  
Best Regards, SCImago Team

D **Dr.Firas Hashem** 1 year ago

Greetings,

Would you please tell me what is your impact factor?

Regards

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Dr. Firas, thank you very much for your comment. SCImago Journal and Country Rank uses Scopus data, our impact indicator is the SJR (Check it on our website). We suggest you consult the Journal Citation Report for other indicators (like Impact Factor) with a Web of Science data source.

Best Regards, SCImago Team

R **Ranitha Weeraratna** 1 year ago

Hi,

May I know whether this H index is applicable to IJSTR till December 2020 ?

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Ranitha,

Thank you for contacting us. Our data come from Scopus, they annually send us an update of the data. This update is sent to us around April / May every year. The SJR for 2019 was released on June 2020, 11. The SJR is updated only once a year, therefore, the

indicators for 2020 will be available in June 2021.

Best Regards, SCImago Team

D **Dr. N. Ahmedzeki** 1 year ago

Dear authors,

There is a note in the journal's web site says " Scopus coverage:  
Nov 2018 to May 2020"

reply



**Tarnima Warda Andalib** 1 year ago

does it follow scopus coverage until now?

A **Ahmed eldeeb** 1 year ago

good journal but very hard template form.

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Ahmed, thanks for your participation! Best Regards, SCImago Team

H **Ha** 1 year ago

Dear all

Based on the updated information from Scopus (september 2020), International Journal of Scientific and Technology Research is discontinued for the reason of ethics concerns.

reply

A **ahmed** 1 year ago

discontinued i think

[https://www.elsevier.com/\\_\\_data/assets/excel\\_doc/0005/877523/Discontinued-sources-from-Scopus.xlsx](https://www.elsevier.com/__data/assets/excel_doc/0005/877523/Discontinued-sources-from-Scopus.xlsx)



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Ha,

Thank you for the info. Could you please provide us your source?

Best Regards, SCImago Team

T **Tarak** 1 year ago

Please give us the source of your information because it is still exist in scopus database

H **HI** 1 year ago

Hi there, it seems that IJST is still Scopus indexed.

<https://www.scopus.com/sourceid/21100894501#tabs=2>

A **anusha a** 1 year ago

can we write papers on supply chain

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Anusha,

thank you for contacting us.

We are sorry to tell you that SCImago Journal & Country Rank is not a journal. SJR is a portal with scientometric indicators of journals indexed in Elsevier/Scopus.

Unfortunately, we cannot help you with your request, we suggest you visit the journal's homepage (See scope and submission/author guidelines) or contact the journal's editorial staff , so they could inform you more deeply.

Best Regards, SCImago Team

M **Malvika Gupta** 1 year ago

Hello Team

I wanna know if I have published my paper in a journal in August which is scopus indexed but scopus database is going to be updated in september. Does in this case my paper will be indexed in the scopus database?

As somebody from my college has published the paper in a scopus journal in July but right now I couldn't find it out in the scopus database.

Can you please share the link from where we can directly access the scopus database.

reply



**Melanie Ortiz** 1 year ago

Dear Malvika,  
thank you very much for your comment, unfortunately we cannot help you with your request. We suggest you contact Scopus support:  
[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)  
Best Regards, SCImago Team

A **Abas** 1 year ago

Hello  
How many months to get the first accept?

reply



**Melanie Ortiz** 1 year ago

Dear Abas,

Thank you for contacting us. Please see comments below.

Best Regards, SCImago Team

C **Cristian Vidal** 1 year ago

Does IJSTR continue being indexed by SCOPUS? One of my papers was accepted by IJSTR to appear in the next number (August 2020). Would It be indexed by SCOPUS?

reply

J **Jesusimo Dioses Jr** 1 year ago

I think it was discontinued by Scopus Already...see the IJSTR website it was stated there till May 2020 only

E **Ethan Oliver** 1 year ago

WEll Done! @ Cristian Vidal Would you share with me Article Publication Fee, Thaanks in Advanced

A **Ani** 1 year ago

Congratulations on your publication! Please, how much is their publication fee?



**Melanie Ortiz** 1 year ago

Dear Cristian,

Thank you very much for your comment.

All the metadata have been provided by Scopus /Elsevier in their last update sent to SCImago, including the Coverage's period data. The SJR for 2019 was released on 11 June 2020. We suggest you consult the Scopus database directly to see the current index status as SJR is a static image of Scopus, which is changing every day. We also inform you that a paper will be considered as Scopus indexed as long as it has been published in the same period in which Scopus has indexed the journal.

Best Regards, SCImago Team

A **anitha perla** 1 year ago

is it Q3 journal for 2020,let me know about this

reply



**Melanie Ortiz** 1 year ago

Dear Anitha,

Thank you for contacting us. Our data come from Scopus, they annually send us an update of the data. This update is sent to us around April / May every year. The SJR for 2019 was released on June 2020, 11. Thus, the indicators for 2020 will be available in June 2021 and before that date we can't know what will happen with this journal.

Best Regards, SCImago Team

A **anitha perla** 1 year ago

dear sir/mam

is IJSTR is showing in scopus.com still it is scopus, but in the ijstr site it is valid form 2018 to 2019.

please give clarity about ds

and also coverage means what ? 2002,2018-2020

reply



**Melanie Ortiz** 1 year ago

Dear Anitha,

Thank you very much for your comment.

All the metadata have been provided by Scopus /Elsevier in their last update sent to SCImago, including the Coverage's period data. The SJR for 2019 was released on 11 June 2020. We suggest you consult the Scopus database directly to see the current index status as SJR is a static image of Scopus, which is changing every day.

Best Regards, SCImago Team



P **Parvathy** 1 year ago

Please tell me if my paper will be indexed in scopus.  
Since june it was mentioned scopus, but now its changed.  
can anyone pls help me wit it.

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Parvathy,  
thank you very much for your comment, unfortunately we cannot help you with your request. We suggest you contact Scopus support:  
[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)  
Best Regards, SCImago Team

D **Derek** 1 year ago

Dear Melanie  
I sometime want to laugh when I see people always asking you about this journal and that journal. I think it is better if the SCI mago put in a headline that this is not the journal but an indexing website and it is main source is SCOPUS.

Regards

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Derek, thanks for your participation! Best Regards, SCImago Team

P **p.sheela** 1 year ago

hi, when ijstr is scopus listed, but my article does not appear in Scopus can i be helped in this regard

reply

A **Asma Ali** 5 months ago

Hi p.sheela  
pleas may help my registration form has been Rejected more than 5 times. Please help to upload the correct ijstr registration form  
with best regards

SCImago Team

**Melanie Ortiz** 5 months ago

Dear Asma, thank you very much for your comment. Unfortunately, we cannot help you with your request, we suggest you contact the journal's editorial staff so they could inform you more deeply. Best Regards, SCImago Team

**L Lakshmi** 1 year ago

It will take minimum one week to maximum of one month to index a paper. Sometimes it will take less time to index and some time it will take one month to index. You can directly contact Scopus team for further enquiries.

**Melanie Ortiz** 1 year ago

SCImago Team

Dear P. Sheela,  
thank you very much for your comment, unfortunately we cannot help you with your request. We suggest you contact Scopus support:  
[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)  
Best Regards, SCImago Team

**P Paru** 1 year ago

Am also facing the same issue, could anyone pls help.

**A Ahmed Abduljabbar jaloob Aljanaby** 1 year ago

Greeting  
We think this is good journal with recent manuscripts  
but need more faster to processing  
we sent our manuscripts before long time without any response until now  
thanks a lot.

reply

**Melanie Ortiz** 1 year ago

SCImago Team

Dear Ahmed, thanks for your participation! Best Regards, SCImago Team

**V Valentine** 1 year ago

In the official web site of the journal, there is a caption that stated that the scopus coverage is from Nov 2018 to May 2020. Does it mean that paper published henceforth, will not be scopus indexed.

reply

V **Vivine Nurcahyawati** 1 year ago

I also have the same question as Valentine. Anyone can give an answer, please.



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Vivine,

Thank you for contacting us. A paper will be considered as Scopus indexed as long as it has been published in the same period in which Scopus has indexed the journal. For example, if the coverage in Scopus is 2014-2016, the papers published in 2017 will not be indexed as the Journal is not indexed in Scopus anymore. For this reason, we always recommend to consult the Scopus database directly to see the current status of a journal .

Best Regards, SCImago Team

M **Milton** 1 year ago

Dear SCIMAGO and SCOPUS TEAM,

I am Milton Medina from the University of Mindanao. Our office is giving incentives for Scopus publication of our faculties and I noticed a few observations on their publications. I noticed that they have published numerous papers in one issue for and the length of acceptance of their papers is just a matter of a day or two. I also noticed that most of the reviews are not focus on the content but rather on template and grammar (I also noticed that this journal has so many grammatical issues).

Not only this journal but among others listed below. Please also check the following journals:

1. International Journal of Advanced Trends in Computer Science and Engineering
2. International Journal of Scientific

reply

M **Milton** 1 year ago

Few of our faculties have published their papers in this journal. Upon reviewing their papers, I found out that there is no (very little review has been done, mostly in grammar and template) review has been done on their papers. The acceptance of the papers is just a matter of days! They submitted their "published" papers to our office for incentive. I also wonder, just in one issue, I guess they have published not less than 10 papers in a single issue? How is this possible for a credible journal?

To Scimago Team (Scopus) please confirm if this journal is really in your list?

Best,

Milton

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Milton,

Thank you for contacting us.

SJR is a portal with scientometric indicators of journals indexed in Scopus. All the data

have been provided By Scopus /Elsevier and SCImago doesn't have the authority over this data. SCImago has no authority to include or exclude SJR journals. We just show the data provided in the latest update by Scopus. We suggest you contact Scopus Support regarding this matter here:  
[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)

Best Regards, SCImago Team

A **Ankit** 1 year ago

What is the publication fee of the journal? It is no where written on the website.

reply

M **Maini** 1 year ago

65 US dollars



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Ankit,  
thank you for contacting us.  
Unfortunately, we cannot help you with your request, we suggest you contact the journal's editorial staff , so they could inform you more deeply.  
Best Regards, SCImago Team

D **D.Kurniadi** 1 year ago

Dear Scopus Team,  
Why until now our publication article in Vol 9 Edition 2 (Feb 2020) with, so far it has not been indexed by Scopus ?. Even though for the latest issue articles already / very quickly indexed Scopus. Please explain the reason

reply

I **Indexing** 1 year ago

Dear DKurniadi,  
If your paper still not indexed in the Scopus database, you have send it to the Scopus request to "Add Missing Documents".  
And they will index your paper to the database.  
I know it because I had the same problem with indexing papers under February Issue.  
Best regards,  
Nodira Rustamova



**Melanie Ortiz** 1 year ago

Dear Nodira, thanks for your participation! Best Regards, SCImago Team



**Melanie Ortiz** 1 year ago

SCImago Team

Dear D. Kurniadi,  
thank you very much for your comment, unfortunately we cannot help you with your request. We suggest you contact Scopus support:  
[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)  
Best Regards, SCImago Team

D **DR. A. I. ASUQUO** 1 year ago

Dear SCImago Team

Thanks for the Good work of information dissemination.

Please is the implication of a Journal being in the Predatory? How can this bad impression be argued out concerning a strong Journal like IJSTR?

Best Regards.

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Dr. Asuquo,

Thank you for contacting us.

SJR is a portal with scientometric indicators of journals indexed in Scopus. All the data have been provided By Scopus /Elsevier and SCImago doesn't have the authority over this data.

For more information about predatory journals or publishers, you can check the link below:

<https://beallslist.weebly.com/>.

If you need more details, please contact Scopus Support directly here:

[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)

Best Regards, SCImago Team

A **Ankit Saha** 1 year ago

how to check the scopus database? Can you provide a link.

Is this journal scopus indexed?

reply



**Melanie Ortiz** 1 year ago

Dear Ankit,

Scopus database can be reached here: [www.scopus.com](http://www.scopus.com)

Best Regards, SCImago Team

A **Ahmed Medhat** 1 year ago

The publication fee?

The period of acceptance in average since the date of submission?

reply



**Melanie Ortiz** 1 year ago

Dear Ahmed,

thank you for contacting us.

Unfortunately, we cannot help you with your request, we suggest you visit the journal's homepage or contact the journal's editorial staff , so they could inform you more deeply.

Best Regards, SCImago Team

L **lhou** 1 year ago

Dear,

I have published my article in this journal (IJSTR) but my article does not appear in Scopus. I don't know why?

reply

H **heru swn** 1 year ago

Need time for article detection by scopus,

for fast detection, you can send request to: [ScopusSupport@elsevier.com](mailto:ScopusSupport@elsevier.com)

(about 10 days the scopus team will include your article in [scopus.com](http://scopus.com))



**Melanie Ortiz** 1 year ago

Dear Lhou,

thank you very much for your comment, unfortunately we cannot help you with your request. We suggest you contact Scopus support:

[https://service.elsevier.com/app/answers/detail/a\\_id/14883/kw/scimago/supporthub/scopus/](https://service.elsevier.com/app/answers/detail/a_id/14883/kw/scimago/supporthub/scopus/)

Best Regards, SCImago Team

F **Farid** 1 year ago

Pay attention!!! This journal (IJSTR) is a predatory journal

reply

S **Saïd Aboubaker Ettis** 1 year ago

Please is the journal a predatory Journal; I found the journal name here in the list of predatory journals

<https://beallslist.weebly.com/>.

reply

O **Omar Aladdin** 7 months ago

How could it be predatory and it was once listed and indexed in Scopus?

What are the analogy behind such listing?

Generally speaking...

Regards

D **Dargie Haile** 1 year ago

I ask one question which is about the legality and payment procedures. in steady of make me clear regarding that the chief editor rejects my paper after 5 monthes. so will it keep up like this in the coming future? how some one can hoped to jion this journal? please make correc.

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Dargie,

thank you for contacting us.

Unfortunately, we cannot help you with your request.

Best Regards, SCImago Team

D **Dargie Haile** 1 year ago

is this journal scopus indx?

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Dargie,

Thank you very much for your comment.

All the metadata have been provided by Scopus /Elsevier in their last update sent to SCImago, including the Coverage's period data. The SJR for 2019 was updated on June 2020, 11. We suggest you consult the Scopus database directly to see the current index status as SJR is a static image of Scopus, which is changing every day.  
Best Regards, SCImago Team

M **Madhukar Wankhade** 1 year ago

Sir I did not find IJSTR in UGC CARE list while searching. Please guide me in this context.

reply



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Madhukar,

Thank you for contacting us. SJR is a portal with scientometric indicators of journals indexed in Elsevier/Scopus. Unfortunately, we cannot help you with your request referring to the index status. We suggest you consult the Scopus database (see the current status of the journal) or other databases (like UGC) for further information. You can also check that information in the journal's website or contact directly with the editorial staff. Best Regards, SCImago Team

W **Wilson** 1 year ago

Kudos to IJSTR. They are really doing well.

reply

S **Sarala S** 1 year ago

Sir

Now this journal have scopus index or not. But Journal Website scopus not mentioned in Journal index.

reply

P **Paru** 1 year ago

its mentioned look to the right side



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Sarala,

Thank you very much for your comment.

All the metadata have been provided by Scopus /Elsevier in their last update sent to SCImago, including the Coverage's period data. The SJR for 2019 was updated on June



2020, 11th. We suggest you consult the Scopus database directly to see the current index status as SJR is a static image of Scopus, which is changing every day.

Best Regards, SCImago Team

L **La Ode Angga** 1 year ago

Is the IJSTR Journal, a CRIDIBEL journal?

reply

F **Farid** 1 year ago

Yes, This journal (IJSTR) is a predatory journal



**Melanie Ortiz** 1 year ago

SCImago Team

Dear La Ode,

Thank you for contacting us.

For more information about predatory journals you can check the link below:

<https://beallslist.weebly.com/>.

Best regards, SCImago Team

M **Mulono Apriyanto** 1 year ago

what year was published in Q3

reply

L **La Ode Angga** 1 year ago

Best IJSRT, hopefully in the future it will rise to Q2 or Q1 ... Amiiin ...

reply

F **Farid** 1 year ago

IJSTR is a predatory journal

N **Navnish Goel** 1 year ago

Could you please share latest SCOPUS JOURNAL Database so that we could identify

reply

S **Swaminathan** 1 year ago

Dear Navnish,

Yes we are continue in scopus. If you have any query contact [chiefeditor@ijstr.org](mailto:chiefeditor@ijstr.org)



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Navnish, thank you very much for your comment. We suggest you consult the Scopus database directly. Keep in mind that the SJR is a static image (the update is made one time per year) of a database (Scopus) which is changing every day.

Best Regards, SCImago Team

P **p.sheela** 1 year ago

is this journal a Scopus journal

reply

R **raman** 1 year ago

its been disabled from scopus now

S **Swaminathan** 1 year ago

Dear Sheela,

yes the our journal is in scopus. If you have any query, Please either contact Scopus or our Journal



**Melanie Ortiz** 1 year ago

SCImago Team

Dear Sir/Madam, thank you very much for your comment. We suggest you consult the Scopus database directly. Keep in mind that the SJR is a static image (the update is made one time per year) of a database (Scopus) which is changing every day.

Best Regards, SCImago Team

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Horatio (Satire 1, 1, 106)



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ISSN 2277-8616

International Journal of Scientific & Technology Research

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e-publication, Volume 10, Issue 11  
November 2021 Edition  
ISSN 2277-8616

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## Effects Of Various Planting Media On Growth Performance Of Melon Plants Grafted With Squash Rootstock

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### AUTHOR(S)

Yusup Bahrul Ulum, Arifah Rahayu, Yanyan Mulyaningsih

### KEYWORDS

melon, squash, grafting, planting media.

### ABSTRACT

Java region, excluding West Java, is a production center of melon (*Cucumis melo* L.). Efforts including the application of grafting method should be done in order to make the plant grow well in West Java region. Squash (*Cucurbita maxima*) is an appropriate plant to be used as rootstock for melon grafting as squash has a close kinship with melon and grows well in West Java region. Planting medium composition is known to have significant effects on the growth of melon plants. This study was aimed at assessing the combination effects of squash accession as rootstock and various planting media on the growth of grafted melon plants. A factorial completely randomized design with two factors was used. The first factor was planting media compositions including 100% soil (control), 25% compost + 75% soil, 50% compost + 50% soil, 25% rice husk charcoal + 75% soil, and 50% rice husk charcoal + 50% soil. The second factor was squash accessions as rootstock including Bogor, Cianjur, and Sukabumi accessions. Grafting was conducted by using slanting technique. Results showed that the use of Sukabumi accession rootstock resulted in more successful grafting, higher rootstock diameter, plant height, number of leaves, number of internodes, and leaf area than that of Bogor and Cianjur accessions. Compared to the use of rice husk charcoal, the use of compost in planting media resulted in plants with higher diameter of rootstock, plant height, number of leaves, number of internodes, and leaf area.

### REFERENCES

[1] C. Arfah, F. Harun and M. Rahmawati, "Pengaruh media tanam dan konsentrasi zat pengatur tumbuh dekamom 22.43 I pada pertumbuhan dan



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- hasil tanaman melon (*Cucumis melo* L.)," *Jurnal Kawista*, vol. 1, no. 1, pp. 10-14, 2016.
- [2] Balittanah, "BIOCHAR Pembenh Tanah yang Potensial.," Balai Penelitian Tanah, Bogor, 2015.
- [3] K. Bariyyah, S. Suparjono and Usmedi, "Pengaruh kombinasi komposisi media organik dan konsentrasi nutrisi terhadap daya hasil tanaman melon (*Cucumis melo* L.)," *Planta Tropika Journal of Agro Science*, vol. 3, no. 2, pp. 67-72, 2015.
- [4] BPS [Badan Pusat Statistik] Kabupaten Bogor, Kabupaten Bogor dalam Angka 2015, Bogor: Katalog BPS: 1102001.3201., 2015.
- [5] Kementan, Statistik Produksi Hortikultura Tahun 2014, Jakarta: Direktorat Jenderal Hortikultura, Kementerian Pertanian RI, 2015.
- [6] I. Cunino and R. Taolin, "Pengaruh takaran arang sekam padi dan bokashi cair terhadap pertumbuhan dan hasil mentimun (*Cucumis sativus* L.)," *Savana Cendana*, vol. 3, no. 2, pp. 24-28, 2018.
- [7] BMKG [Badan Meteorologi Klimatologi dan Geofisika], "Laporan iklim harian," BMKG [Badan Meteorologi Klimatologi dan Geofisika], 2019. [Online]. Available: [http://dataonline.bmkg.go.id/data\\_iklim](http://dataonline.bmkg.go.id/data_iklim). [Accessed 5 May 2019].
- [8] H. Hartmann, D. Kester, F. Davies and R. Geneve, Hartmann and Kester's Plant Propagation : Principles and Practice, Eighth Edition ed., New Jersey.: Prentice Hall, 2002.
- [9] R. Mustaqim, Armaini and E. N. Yulia, "Pengaruh pemberian kompos tandan kosong kelapa sawit dan pupuk N, P, K terhadap pertumbuhan dan produksi tanaman melon (*Cucumis melo* L.)," *JOM FAPERTA*, vol. 3, no. 1, pp. 1-13, 2016.
- [10] D. Setyorini, R. Saraswati and E. K. Anwar, *Kompos*, Bogor: Balai Penelitian Tanah., 2006.
- [11] Suharno, I. Mawardi, Setiabudi, N. Lunga and S. Tjitrosemito, "Efisiensi penggunaan nitrogen pada tipe vegetasi yang berbeda di Stasiun Penelitian Cikaniki, Taman Nasional Gunung Halimun Salak, Jawa Barat," *Biodiversitas*, vol. 8, no. 4, pp. 287-294, 2007.
- [12] DMBPPIPT, *Melon (Cucumis melo L.). Tentang Budidaya Pertanian*. 1-19., DMBPPIPT [Deputi Menegristek Bidang Pendayagunaan dan Pemasyarakatan Ilmu Pengetahuan dan Teknologi], 2000.
- [13] E. Mavrona, M. Sotirioub and T. Pritsa, "Response of squash (*Cucurbita* spp.) as rootstock for melon (*Cucumis melo* L.)," *Scientia Horticulturae*, vol. 83, no. 1, pp. 353-362, 2000.
- [14] BPS, *Konsep dan Definisi Baku Statistik Pertanian 2012*, Jakarta: BPS [Badan Pusat Statistik], 2012.

# Effects Of Various Planting Media On Growth Performance Of Melon Plants Grafted With Squash Rootstock

Yusup Bahrul Ulum, Arifah Rahayu, Yanyan Mulyaningsih

**Abstract**— Java region, excluding West Java, is a production center of melon (*Cucumis melo* L.). Efforts including the application of grafting method should be done in order to make the plant grow well in West Java region. Squash (*Cucurbita maxima*) is an appropriate plant to be used as rootstock for melon grafting as squash has a close kinship with melon and grows well in West Java region. Planting medium composition is known to have significant effects on the growth of melon plants. This study was aimed at assessing the combination effects of squash accession as rootstock and various planting media on the growth of grafted melon plants. A factorial completely randomized design with two factors was used. The first factor was planting media compositions including 100% soil (control), 25% compost + 75% soil, 50% compost + 50% soil, 25% rice husk charcoal + 75% soil, and 50% rice husk charcoal + 50% soil. The second factor was squash accessions as rootstock including Bogor, Cianjur, and Sukabumi accessions. Grafting was conducted by using slanting technique. Results showed that the use of Sukabumi accession rootstock resulted in more successful grafting, higher rootstock diameter, plant height, number of leaves, number of internodes, and leaf area than that of Bogor and Cianjur accessions. Compared to the use of rice husk charcoal, the use of compost in planting media resulted in plants with higher diameter of rootstock, plant height, number of leaves, number of internodes, and leaf area.

**Index Terms**— melon, squash, grafting, planting media.

## 1 INTRODUCTION

Melon (*Cucumis melo*) is fruit that can be eaten directly or in processed forms. In Indonesia, melon production center is in Java (90%) with a production of 134,656 tons out of total national production of 150,347 tons. East Java had the highest annual melon production (57,681 tons), followed by Central Java (42,979 tons), Special Region of Yogyakarta (33,063 tons), and Banten (889 tons). Meanwhile, total melon production in West Java was only 44 tons. Melon farm productivity in West Java was only 1.33 tons/hectare while in other provinces in Java Island, it was 16-20 tons/hectare [1]. Melon plant is known to be susceptible to the attack of pathogens growing well in areas with high humidity including Bogor area in West Java which has a considerable wet tropic climate with average rainfall rates of 2,500-5,000 mm/year [2][13]. Base stem rot caused by *Mycopharekka melonis* P. fungus is one of the most common diseases found in melon [3]. Using seeds produced by grafting method is a way to avoid this disease. Grafting is aimed at improving the quality of melon plants by using rootstocks from plants which are more tolerant to the environmental condition of the area where the plants are grown. The success of grafting is also affected by botanical kinship of the plants to be grafted. Melon (*Cucumis melo*) and squash (*Cucurbita maxima*) belong to the same family of Cucurbitaceae. Studies showed that the two species were compatible in grafting [4][5]. National squash production in 2011 was 352,300 tons with the highest contribution came from West Java (155,310 tons), followed by

Central Java (121,630 tons), Bengkulu (38,374 tons), Lampung (22,375 tons), and East Java (14,611 tons). West Java had been the biggest producer since 2007 with total production of squash ten times higher than that of the other provinces. This indicated that squash had good tolerance and grew well in West Java area. Planting medium is another factor affecting the growth of melon plants. Compost and rice husk charcoal are among the common media used for melon planting. Studies showed that the use of compost medium was found to profoundly support the growth and production of melon [6][7]. In some studies, the use of rice husk charcoal as a single planting medium did not give significant effect on the growth of melon so that it needed to be mixed with compost or cocopeat [8]. The use of rice husk charcoal as a single medium or a mixed medium in some studies (Pangestu 2004 and Sesanti 2018)[14] was focused on melon planting so that it could not yet be used as a benchmark in this study. However, it was expected that grafted melon plants be able to give good response to the use of rice husk charcoal as a planting medium. This study was aimed at assessing the response of melon plants to the use of squash of Bogor, Cianjur, and Sukabumi accessions as rootstocks and planting medium compositions.

## 2 MATERIALS AND METHODS

### 2.1 Time and Site

The study was conducted at Kampung Balandongan, Cihayang Pondok Village, Caringin District, Bogor Regency, West Java Province from November 2018 to February 2019.

### 2.2 Equipment and Materials

The equipment used included gillette, pruning shears, watering can, balance, measuring tape, caliper, pesticide sprayer, and soil loosening tools. Materials used included polybags, seed sowing trays, melon seeds (Amanta F1), squash seeds (Bogor, Cianjur, and Sukabumi accessions), planting media (soil, compost containing sheep manure, and rice husk charcoal), synthetic fertilizers (urea, TSP, and KCl), and pesticide.

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Squash seeds were obtained from Ciapus Village, Ciomas District, Bogor Regency (Bogor accession), Pasawahan Village, Takokak District, Cianjur Regency (Cianjur accession), and Tegal Laya Village, Lembur Situ District, Sukabumi City (Sukabumi accessions).

### 2.3 Methods

A factorial completely randomized design with two factors was used. The first factor was planting medium composition (volume-based ratio) and the second was squash accession as rootstock.

The planting media consisted of five levels including 100% soil (control, A1), 25% compost + 75% soil (A2), 50% compost + 50% soil (A3), 25% rice husk charcoal + 75% soil (A4), and 50% rice husk charcoal + 50% soil (A5). Squash accessions included Bogor accession (B1), Cianjur accession (B2), and Sukabumi accession (B3). There were 15 treatments combinations and 3 replicates making up 45 experimental units. A total of 450 observation units were used as 10 observation units were allocated on each experimental unit. Data were subjected to an analysis of variance and a Duncan Multiple Range Test (DMRT) at a significant level of 5%.

### 2.4 Research Execution

Scion and rootstock were grown by sowing the seeds on seed sowing trays. Scion seeds were sown five days earlier than rootstock seeds. Sowing media were the mixtures of made of soil (1 part), compost (1 part), and rice husk charcoal (1 part). Grafting was conducted when the rootstocks aged 7 days after sowing (DAS). A slanting technique of grafting was applied. Slanting cuts were made on the apical bud of rootstocks leaving a cotyledon and 2 cm above the stem base of scions. Scion and rootstock cuts were bound by using grafting clips. Grafted seedlings were placed under a plastic shade with high humidity in order to avoid death caused by transpiration that might occur as scion and rootstock were not tightly bound. The seedlings were then grown in ploybags containing planting medium compositions. Plants were watered twice daily in the morning and afternoon when there was no rain. Control of pests and diseases was done twice a month through pesticide spraying. Weed control was done manually. Fertilizer was administered gradually. Basic fertilizers including urea, TSP, and KCl were given at the time of medium preparation. Supplementary fertilization was administered twice on 10 days after planting (DAP) (urea and TSP) and 20 DAP (urea, TSP, and KCl). Measurements were taken on percentage of grafting success, stem diameter, plant height, number of leaves, number of internodes, and average leaf area.

## 3 RESULTS AND DISCUSSION

### 3.1 Percentage of Grafting Success

It was found that melon grafting by using squash of Sukabumi accession as the rootstock had the highest percentage of grafting success. Observation was conducted for 2 weeks on 200 plants of in each accession. The percentages of grafting success were 98.5% (197 plants), 95% (190 plants), and 93.5% (187 plants) in Sukabumi, Bogor, and Cianjur accessions, respectively.

### 3.2 Rootstock Diameter

Rootstock diameter was affected by accession and planting

medium combinations (2-3 WAP) but not by any interaction between accession and planting media. Rootstock diameter in planting medium of 50% compost + 50% soil was higher than that in control and planting medium of rice husk charcoal + soil at 2-3 WAP but not different from that in planting medium of 25% compost + 75% soil. Rootstock diameter of Sukabumi accession was higher than that of Bogor and Cianjur accessions in 2-3 WAP (Table 1).

Table 1  
Rootstock Diameter

Treatment	Rootstock diameter			
	0 WAP	1 WAP	2 WAP	3 WAP
Planting Medium	----- cm -----			
100% soil (control)	0.40	0.42	0.44 <sup>a</sup>	0.48 <sup>ab</sup>
25% compost + 75% soil	0.40	0.42	0.46 <sup>ab</sup>	0.49 <sup>bc</sup>
50% compost + 50% soil	0.40	0.42	0.47 <sup>b</sup>	0.51 <sup>c</sup>
25% rice husk charcoal + 75% soil	0.40	0.42	0.45 <sup>a</sup>	0.48 <sup>ab</sup>
50% rice husk charcoal + 50% soil	0.40	0.42	0.44 <sup>a</sup>	0.47 <sup>a</sup>
Accession				
Bogor	0.40	0.42	0.45 <sup>ab</sup>	0.49 <sup>ab</sup>
Cianjur	0.39	0.41	0.44 <sup>a</sup>	0.48 <sup>a</sup>
Sukabumi	0.40	0.42	0.46 <sup>b</sup>	0.50 <sup>c</sup>

Remark: Different superscripts in the same column indicate differences (P<0.05)

### 3.3 Plant Height

Planting media, accessions and their interaction gave significant effects on plant height at 1-3 WAP. Height of plants with Sukabumi accession as rootstock was significantly higher than that of Bogor and Cianjur accessions in various planting medium composition except in 50% compost + 50% soil. Melon plants grafted by using rootstock of Bogor and Cianjur squash accessions and grown in planting medium of 50% compost + 50% soil had the highest plant height. Meanwhile, melon plants having squash of Sukabumi accession as rootstock did not have different plant height from those in control, 25% compost + 75% soil, and 25% rice husk charcoal + 75% soil planting media (Table 2).

Table 2  
Height of plants at 1-3 WAP in planting media and accession combinations

Age	Treatment	Accession		
	Planting Medium	Bogor	Cianjur	Sukabumi
1 WAP	100% soil (control)	15.28 <sup>bcd</sup>	14.14 <sup>a</sup>	17.36 <sup>e</sup>
	25% compost + 75% soil	15.45 <sup>cd</sup>	14.97 <sup>abcd</sup>	17.47 <sup>e</sup>
	50% compost + 50% soil	16.72 <sup>e</sup>	15.86 <sup>e</sup>	17.23 <sup>e</sup>
	25% rice husk charcoal + 75% soil	15.27 <sup>bcd</sup>	14.45 <sup>ab</sup>	16.96 <sup>e</sup>
	50% rice husk charcoal + 50% soil	14.52 <sup>abc</sup>	14.11 <sup>a</sup>	15.23 <sup>bcd</sup>
2 WAP	100% soil (control)	21.90 <sup>bc</sup>	19.34 <sup>a</sup>	25.94 <sup>f</sup>
	25% compost + 75% soil	22.35 <sup>cd</sup>	21.26 <sup>bc</sup>	26.27 <sup>f</sup>
	50% compost + 50% soil	25.17 <sup>ef</sup>	23.70 <sup>de</sup>	26.16 <sup>f</sup>
	25% rice husk	21.76 <sup>bc</sup>	20.26 <sup>ab</sup>	25.28 <sup>ef</sup>

		charcoal + 75% soil			
	50% rice husk charcoal + 50% soil	21.32 <sup>bc</sup>	20.46 <sup>ab</sup>	22.60 <sup>cd</sup>	
		charcoal + 50% soil			
3 WAP	100% soil (control)	30.33 <sup>bc</sup>	26.78 <sup>a</sup>	36.54 <sup>f</sup>	
	25% compost + 75% soil	30.91 <sup>cd</sup>	29.58 <sup>bc</sup>	36.90 <sup>f</sup>	
	50% compost + 50% soil	35.47 <sup>ef</sup>	33.23 <sup>f</sup>	37.25 <sup>f</sup>	
	25% rice husk charcoal + 75% soil	30.19 <sup>bc</sup>	27.87 <sup>ab</sup>	35.41 <sup>ef</sup>	
	50% rice husk charcoal + 50% soil	29.24 <sup>abc</sup>	28.98 <sup>abc</sup>	30.84 <sup>cd</sup>	

Remark: Different superscripts in the same column indicate differences (P<0.05)

**3.4 Number of Leaves**

Number of leaves was significantly affected by planting medium, accession, and their interaction at 1 and 2 WAP but not at 3 WAP (Table 3). Number of leaves of melon plants grafted with squash of Sukabumi accession as rootstock was higher than that of melon plants grafted with squash of Bogor and Sukabumi accessions as rootstock. However, no different number of leaves was found in plants grown in 50% compost + 50% soil planting medium at 2 WAP. The lowest number of leaves was found in plants grown in rice husk charcoal + soil planting media (Table 4).

Table 3  
Number of leaves

Treatment	Number of leaves			
	0 WAP	1 WAP	2 WAP	3 WAP
Planting Medium				
100% soil (control)	2.00	3.68	6.18	8.53 <sup>c</sup>
25% compost + 75% soil	2.00	3.57	6.10	8.68 <sup>cd</sup>
50% compost + 50% soil	2.00	3.30	6.43	8.94 <sup>d</sup>
25% rice husk charcoal + 75% soil	2.00	3.53	5.48	7.97 <sup>b</sup>
50% rice husk charcoal + 50% soil	2.00	3.30	4.89	7.41 <sup>a</sup>
Accession				
Bogor	2.00	3.33	5.70	8.15 <sup>a</sup>
Cianjur	2.00	3.18	5.50	8.06 <sup>a</sup>
Sukabumi	2.00	3.19	6.25	8.71 <sup>b</sup>

Remark: Different superscripts in the same column indicate differences (P<0.05)

Table 4  
Number of leaves of grafted melon plants at 1-2 WAP in planting media and accession combinations

Age	Treatment	Accession			
		Medium	Bogor	Cianjur	Sukabumi
1 WAP	100% soil (control)		3.50 <sup>bc</sup>	3.27 <sup>abc</sup>	4.27 <sup>d</sup>
	25% compost + 75% soil		3.40 <sup>abc</sup>	3.17 <sup>abc</sup>	4.13 <sup>d</sup>
	50% compost + 50% soil		3.30 <sup>abc</sup>	3.13 <sup>ab</sup>	3.47 <sup>abc</sup>
	25% rice husk charcoal + 75% soil		3.33 <sup>abc</sup>	3.10 <sup>a</sup>	4.17 <sup>d</sup>
	50% rice husk charcoal + 50% soil		3.13 <sup>ab</sup>	3.23 <sup>abc</sup>	3.53 <sup>c</sup>
2 WAP	100% soil (control)		6.00 <sup>de</sup>	5.73 <sup>cd</sup>	6.80 <sup>f</sup>
	25% compost + 75% soil		5.83 <sup>cd</sup>	5.70 <sup>cd</sup>	6.77 <sup>f</sup>
	50% compost + 50% soil		6.43 <sup>ef</sup>	6.43 <sup>ef</sup>	6.43 <sup>ef</sup>
	25% rice husk charcoal + 75% soil		5.43 <sup>bc</sup>	4.93 <sup>ab</sup>	6.07 <sup>de</sup>
	50% rice husk charcoal + 50% soil		4.80 <sup>a</sup>	4.70 <sup>a</sup>	5.17 <sup>ab</sup>

charcoal + 50% soil  
Remark: Different superscripts in the same column indicate differences (P<0.05)

**3.5 Number of Internodes**

Number of internodes was significantly affected by planting medium, rootstock accession, and their interaction in 2 WAP but not in 1 and 3 WAP (Table 5). The highest number of internodes was found in melon plants grafted using squash of Sukabumi accessions as rootstock. However, no differences were found in plants grown in 50% compost + 50% soil planting medium. The lowest number of internodes was found in grafted melon plants grown in 50% rice husk charcoal + 50% soil planting medium (Table 6).

Table 5  
Number of internodes

Treatment	Number of internodes			
	0 WAP	1 WAP	2 WAP	3 WAP
Planting medium				
100% soil (control)	1.00	3.14 <sup>b</sup>	5.77	7.97 <sup>c</sup>
25% compost + 75% soil	1.00	3.12 <sup>b</sup>	5.56	8.20 <sup>c</sup>
50% compost + 50% soil	1.00	2.82 <sup>a</sup>	6.00	8.39 <sup>c</sup>
25% rice husk charcoal + 75% soil	1.00	3.00 <sup>ab</sup>	4.90	7.40 <sup>b</sup>
50% rice husk charcoal + 50% soil	1.00	2.78 <sup>a</sup>	4.40	6.91 <sup>a</sup>
Accession				
Bogor	1.00	2.83 <sup>a</sup>	5.23	7.61 <sup>a</sup>
Cianjur	1.00	2.69 <sup>a</sup>	5.04	7.53 <sup>a</sup>
Sukabumi	1.00	2.39 <sup>b</sup>	5.71	8.17 <sup>b</sup>

Remark: Different superscripts in the same column indicate differences (P<0.05)

Table 6  
Number of internodes of grafted melon plants at 2 WAP in planting media and accession combinations

Age	Treatment	Accession		
		Bogor	Cianjur	Sukabumi
2 WAP	100% soil (control)	5.47 <sup>cde</sup>	5.40 <sup>cd</sup>	6.43 <sup>f</sup>
	25% compost + 75% soil	5.40 <sup>cd</sup>	5.10 <sup>bc</sup>	6.17 <sup>f</sup>
	50% compost + 50% soil	6.10 <sup>ef</sup>	6.07 <sup>ef</sup>	5.83 <sup>def</sup>
	25% rice husk charcoal + 75% soil	4.90 <sup>abc</sup>	4.33 <sup>a</sup>	5.47 <sup>cde</sup>
	50% rice husk charcoal + 50% soil	4.27 <sup>a</sup>	4.30 <sup>a</sup>	4.63 <sup>ab</sup>

Remark: Different superscripts in the same column indicate differences (P<0.05)

**3.6 Average Leaf Area**

Planting medium, rootstock accession, and their interaction were found to significantly affect average leaf area. Highest average leaf area was shown by grafted melon plants using squash of Sukabumi accession grown in 50% compost + 50% soil planting medium. The lowest average leaf area was found in melon plants grown in rice husk charcoal + soil planting media (Table 7).

Table 7  
Average leaf area of grafted melon plants at 3 WAP in planting media and accession combinations

Age	Treatment	Accession
-----	-----------	-----------

	Planting medium	Bogor	Cianjur	Sukabumi
3 WAP	100% soil (control)	21.98 <sup>abcd</sup>	22.69 <sup>abcd</sup>	27.29 <sup>cd</sup>
	25% compost + 75% soil	40.27 <sup>e</sup>	30.53 <sup>d</sup>	54.95 <sup>f</sup>
	50% compost + 50% soil	48.24 <sup>ef</sup>	41.86 <sup>e</sup>	63.77 <sup>g</sup>
	25% rice husk charcoal + 75% soil	18.85 <sup>abc</sup>	17.65 <sup>ab</sup>	25.65 <sup>abcd</sup>
	50% rice husk charcoal + 50% soil	16.85 <sup>ab</sup>	15.79 <sup>a</sup>	22.53 <sup>abcd</sup>

Remark: Different superscripts in the same column indicate differences ( $P < 0.05$ )

## 4 DISCUSSION

### 4.1 General Condition and Field Constraints

During the trial period from December 2018 to January 2019, there were, on average, high rainfall of 12.69 mm/hour, high humidity level of 88.49%, temperature of 21.22°C, and photoperiod of 1.79 hours/day [9]. These climate constraints had not allowed the study to be conducted until the plants reached their reproductive phase. This climatic condition made the plants fragile and perishable as they had high water content. Consequently, observations were conducted only in vegetative phase.

### 4.2 The Growth of Grafted Melon Plants Grown in Various Planting Medium Compositions

#### 4.2.1 Effects of Squash as Rootstocks

Melon plants grafted by using squash of Sukabumi accession as rootstock in this study were found to have better results than by using Bogor and Cianjur accessions. As rootstock, compared to other accessions, squash of Sukabumi accession had better characteristics in terms of their fruit weight, fruit flesh thickness, fruit perimeter, fruit height, number of seeds, seed viability, and percentage of grafting success. These characteristics were suspected to support the growth of melon plants. However further studies were required to support this notion.

#### 4.2.2 Effects of Planting Medium Compositions

In their vegetative phase, grafted melon plants showed the best responses to compost + soil planting media while those to rice husk charcoal + soil were relatively lower than those to control. These differences might be caused by different content of nitrogen (N) in compost and rice husk charcoal. It is shown in Table 7 that compost (sheep manure) had higher N content than rice husk charcoal [10]. In plants, nitrogen is very important for the formation of chlorophyll which plays a role as an 'engine' that synthesizes carbohydrate to support the growth and new cell formation [11]. The use of Dekamon growth promoter in melon grown in compost medium was found to produce fruits with higher fruit weight and fruit diameter than melon grown in other planting medium (raw rice husk) [6]. Results of another study by Mustaqim [7] also showed that melon plants grown in compost medium had higher stem diameter, higher plant height, and faster flower formation. In this study, grafted melon grown in rice husk charcoal media had low production. This was in line with results of a study of Cunino and Taolin [12] who found that there was no significant vegetative growth shown by cucumber plants grown in rice husk charcoal medium. However, if the trial was conducted until the reproductive phase, some

positive effects on melon production, similar to what was found in cucumber [12], would be observed.

Table 8  
Nutrient contents of compost and rice husk charcoal planting media

Planting Medium	Nutrient content			Reference
	----- % -----			
	N	P	K	
Compost (sheep manure)	1.28	0.19	0.93	Setyorini <i>et al.</i> 2006 [14]
Rice husk charcoal	0.05	0.23	0.06	Balittanah 2015 [10]

## 5 CONCLUSION

Melon plants (Amanta F1 variety) grafted by using squash as rootstock of various accessions and grown in various planting media were found to have different growth. As rootstock, squash of Sukabumi accession gave better results in several parameters measured than those of Bogor and Cianjur accessions. These findings indicated that squash of Sukabumi accession had potential characteristics supporting its use as rootstock for melon grafting. However, this notion needs to be proven further. Compost + soil was the planting medium which gave the best effects on the growth of grafted melon plants as it contained more N than rice husk charcoal. Higher composition of rice husk charcoal hampered the growth of grafted melon plants, even when it was compared with control.

## 6 RECOMMENDATIONS

In this study, only one grafting technique (slanting cut) was used. Studies on other grafting techniques and their effects on the success of grafting deserve to be conducted. Further studies on the effects of characteristics of seed sources (squash quality) on the growth of grafted melon plants were also recommended.

## REFERENCES

- [1] C. Arfah, F. Harun and M. Rahmawati, "Pengaruh media tanam dan konsentrasi zat pengatur tumbuh dekamon 22.43 I pada pertumbuhan dan hasil tanaman melon (*Cucumis melo* L.)," *Jurnal Kawista*, vol. 1, no. 1, pp. 10-14, 2016.
- [2] Balittanah, "BIOCHAR Pembena Tanah yang Potensial.," Balai Penelitian Tanah, Bogor, 2015.
- [3] K. Bariyyah, S. Suparjono and Usmadi, "Pengaruh kombinasi komposisi media organik dan konsentrasi nutrisi terhadap daya hasil tanaman melon (*Cucumis melo* L.)," *Planta Tropika Journal of Agro Science*, vol. 3, no. 2, pp. 67-72, 2015.
- [4] BPS [Badan Pusat Statistik] Kabupaten Bogor, Kabupaten Bogor dalam Angka 2015, Bogor: Katalog BPS: 1102001.3201., 2015.
- [5] Kementan, Statistik Produksi Hortikultura Tahun 2014, Jakarta: Direktorat Jenderal Hortikultura, Kementerian Pertanian RI, 2015.
- [6] I. Cunino and R. Taolin, "Pengaruh takaran arang sekam padi dan bokashi cair terhadap pertumbuhan dan hasil mentimun (*Cucumis sativus* L.)," *Savana Cendana*, vol. 3, no. 2, pp. 24-28, 2018.



- [7] BMKG [Badan Meteorologi Klimatologi dan Geofisika], "Laporan iklim harian," BMKG [Badan Meteorologi Klimatologi dan Geofisika], 2019. [Online]. Available: [http://dataonline.bmkg.go.id/data\\_iklim](http://dataonline.bmkg.go.id/data_iklim). [Accessed 5 May 2019].
- [8] H. Hartmann, D. Kester, F. Davies and R. Geneve, Hartmann and Kester's Plant Propagation : Principles and Practice, Eighth Edition ed., New Jersey.: Prentice Hall, 2002.
- [9] R. Mustaqim, Armaini and E. N. Yulia, "Pengaruh pemberian kompos tandan kosong kelapa sawit dan pupuk N, P, K terhadap pertumbuhan dan produksi tanaman melon (Cucumis melo L.)," *JOM FAPERTA*, vol. 3, no. 1, pp. 1-13, 2016.
- [10] D. Setyorini, R. Saraswati and E. K. Anwar, Kompos, Bogor: Balai Penelitian Tanah., 2006.
- [11] Suharno, I. Mawardi, Setiabudi, N. Lunga and S. Tjitrosemito, "Efisiensi penggunaan nitrogen pada tipe vegetasi yang berbeda di Stasiun Penelitian Cikaniki, Taman Nasional Gunung Halimun Salak, Jawa Barat," *Biodiversitas*, vol. 8, no. 4, pp. 287-294, 2007.
- [12] DMBPPIPT, Melon (Cucumis melo L.). Tentang Budidaya Pertanian. 1-19., DMBPPIPT [Deputi Menegristek Bidang Pendayagunaan dan Pemasyarakatan Ilmu Pengetahuan dan Teknologi], 2000.
- [13] E. Mavrona, M. Sotirioub and T. Pritsa, "Response of squash (Cucurbita spp.) as rootstock for melon (Cucumis melo L.)," *Scientia Horticulturae*, vol. 83, no. 1, pp. 353-362, 2000.
- [14] BPS, Konsep dan Definisi Baku Statistik Pertanian 2012, Jakarta: BPS [Badan Pusat Statistik], 2012.