

# Cultivating and Popularizing Organic Cotton

## ~What I can do as a high school student~

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### 1, Why did I Start This Research?

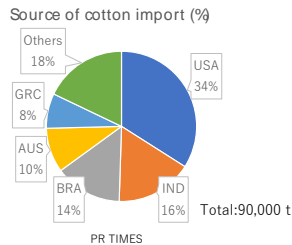
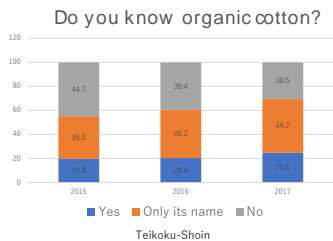
#### Motivations:



#### My goals:

- Telling a lot of people about organic cotton
- Encourage people to think about global problems
- Cultivating organic cotton in a new method with less burden to the environment and people

### 2, Japan and Cotton



- The understanding of organic cotton is gradually increasing in Japan
- However, Japan mostly imports cotton from the USA and BRA, where cotton is cultivated in conventional ways.

### 3, Why is Organic Cotton Good?

- →Organic cotton is regulated not only in cultivation but also production.

Merits (Especially suitable for small-scale agriculture in India)	Assignments
<ul style="list-style-type: none"> <li>• Less burden on farmers and the environment</li> <li>• Increase our awareness of global issues</li> </ul>	<ul style="list-style-type: none"> <li>• Overly strict regulation</li> <li>• Risk of too much unsold cotton after present boom of SDGs</li> </ul>



### 4, Cotton Cultivation Pot

#### What are the pots' merits?

- Saving water
- Reducing plastic consumption
- Using unsalable cotton  
→Cutting the discarding cost  
Getting money by selling them



↑ Cultivation pots made from organic cotton

### 5, The Research of Effectiveness of the Pot

1<sup>st</sup> year

RQ: Can the pot be usable?

→Cotton is biodegradable, so it should be usable.

	Length (cm)	Cotton balls
Using pots (8 plants)	18.9 ± 16.2	0
Not using pots (86 plants)	71.0 ± 16.1	4.8 ± 2.7

#### Result

- The data was not useful.
- Soil temperature was very low  
→It could be a reason?

#### A next assignment

→Heat retention

2<sup>nd</sup> year

RQ: How can the pots overcome low heat retention?

→Painting pots black could be effective.

- 1 Black plastic pot
- 2 Jiffy pot (biodegradable pot)
- 3 White cotton pot
- 4 Black cotton pot

#### Result

- Painting black increased the temperature by 0.7°C  
→As high as biodegradable pots on the market

#### A next assignment

→Finding other factors to make cotton pots useful.

Plastic	Jiffy	Cotton(W)	Cotton(B)
28.4°C	26.4°C	26.0°C	26.7°C

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### 6, Activities to Teach Organic Cotton

Workshop at Mt.Takao Visitor Center

Minamitama Organic Cotton Team



<https://www.kankyo.metro.tokyo.lg.jp/naturepark/know/shisetsu/visitorcenter/takao.html>



### 7, Conclusion and Suggestions

#### • Result of my research

- I could not make a useful cotton pot.
- I could improve its low heat retention.
- The idea can still be useful.
- →Check other factors. ex, water retention, thickness

#### • Suggestions

- Let's integrate organic cotton in our lives.
- In your school, you can cultivate cotton and use it, too.
- Organic cotton can expand your world!!