

**The condition in which  
Nobuki is exclusively dominant**

Buma Kengo

# Introduction

- I found two populations of Nobuki.
- There the population densities of it is very high, and that of other species very low.
- Why is that?

# Objective

- In forest it is rare that only one specie of Grass monopolizes a place. Generally many species live side by side even in small area.
- I want to know why such the rare phenomenon occurs.

# Method

- Measuring light intensity and comparing Nobuki's dominance with it.
- Observing two communities and finding some facts.
  - ⇒ Finding the conditions of Nobuki being exclusively dominant.

# What is Nobuki

- Scientific name:  
Adenocaulon himalaicum
- Perennial plant
- living in a shade of a tree
- Seed dispersal: zoochory

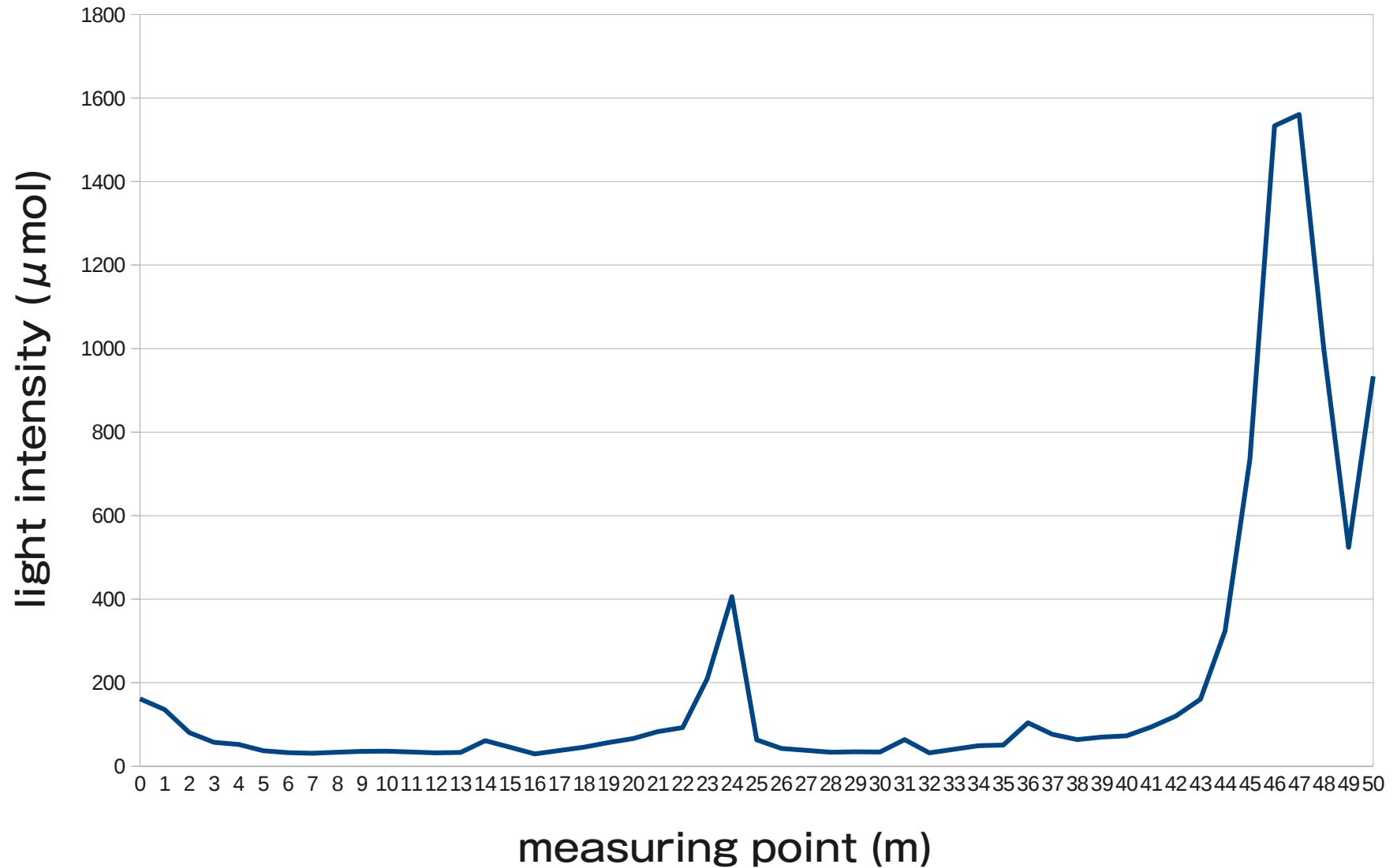


# Measuring light intensity

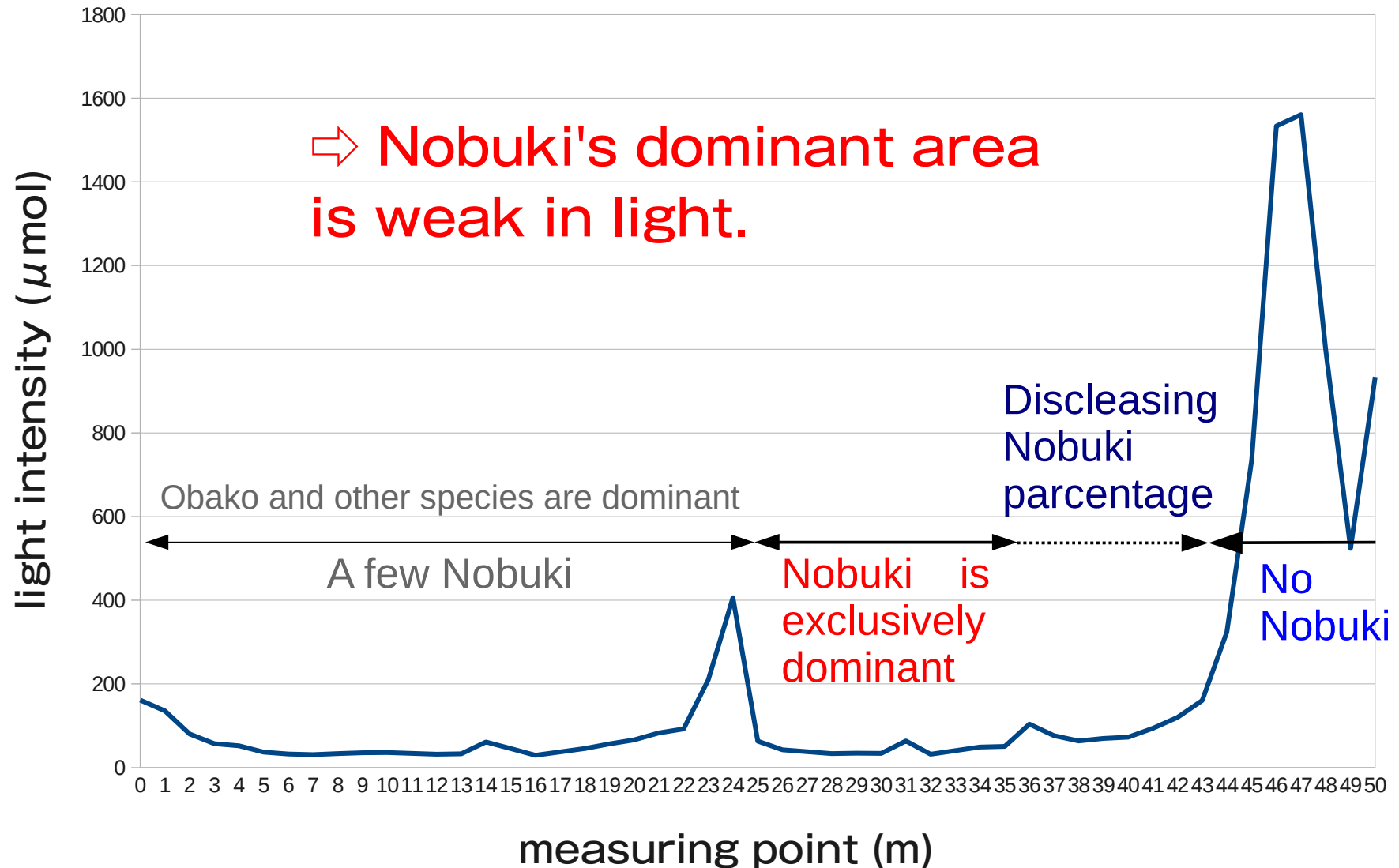


- Near Akashio-sawa, plants distribute sandwiched between two imprints of tires.
- So I can measure light intensity one dimensionally.
- I measured light intensity every one meter, from 0 to 50 meter.

# Result - Measuring light intensity



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# Observing two communities

- I already know light intensity is dominant factor for the distribution of Nobuki. But only that can't explain exclusively dominance of Nobuki. There are many places in mountain that Nobuki doesn't inhabit nevertheless in the shade.
- So I collected some facts by observing plants communities including Nobuki and their environments, and assumed other factors.

# Some finding facts

- At the community near akashio-sawa, what is done by human is found.
- Some artifacts are also found at the community near Chigono-sawa.
- But in the deep mountain, no artifact and Nobuki are found.
  - ⇒ Nobuki often grows in the place disturbed by human.

# Conclusion

- Finally, I found two conditions in which Nobuki is exclusively dominant.
  1. weakness in light
  2. disturbed by human constantly
- Because of the first condition Nobuki can grow in the shade unlike other species, and because of the second condition the plants community keeps Nobuki's dominance.