

General Plant Biology

Course number-A105

Lecture objective:

Basically, this course will give the undergraduate students an idea about taking a course in English and make them comfortable with a foreign language. In addition, this course will also focus on the very basics of the plant biology.

講義の目的

基本的にこのコースは学部生に英語でコースを取ることのアイデアを与え、外国語に対して抵抗をなくす。
加えて、このコースでは植物生理学の基礎に着目していく。

Brief Description of the course:

An introduction to plant biology with emphasis on dicot plants. Selected topics from anatomy, cell biology, genetics, morphology, physiology and molecular biology will be taught.

講義の簡単な説明:

双子葉植物に重点を置いて植物生物学紹介。

解剖学、細胞生物学、遺伝学、形態学、生理学および分子生物学から選択したトピックが学べる。

Weekly Plan

Course number-A105

Thursday: 8:35-10:15 AM

Week-1-April-18- Introduction about the course and get acquainted with the students/コースの紹介と生徒との交流

Week-2-April 25- Plant and Plant Cells/植物および植物細胞

Week-3-May 2--Plant Cell organelles-1/植物細胞オルガネラ-1

Week-4- May 9 - Plant Cell organelles-2 /植物細胞オルガネラ-2(Take Home Exam-1)/ (課題-1)

Week-5-May 16- Cell cytoskeleton, Cell division-1/細胞骨格、細胞分裂-1

Week-6-May 23- Cell cytoskeleton, Cell division-2/細胞骨格、細胞分裂-2

Week-7-May 30- Water and Solute transport /水と溶質の輸送

Week-8-June 6 -Photosynthesis-1/光合成-1 (Take-home exam -2)/(課題-2)

Week-9-June 13- Photosynthesis-2/光合成-2 Review class/レビュークラス

Week-10-June 20-Genetics-1/(Take Home Exam-3)遺伝学-1(課題-3)

Week-11-June 27- **No Class/休み**

Week-12-July 4-Genetics-2/遺伝学-2

Week-13-July 11-Group Presentation on GMO/遺伝子組み換え作物に関するグループプレゼンテーション

Week-14-July 18-Review class/レビュークラス/Feedback on presentation/発表に関するフィードバック

Week-15-July 25- Summarized Final exam/まとめた最終試験

Grading Format:

50% from Midterm take home exams, presentation, and class attendance

50% from final exam

Activities from the students during the semester:

Active participation in the class lectures and discussion on their problems.

学期中に学生からの活動

講義への積極的な参加

講義のわからない文に関する問題についての議論

Grading Format:

50% from Midterm take home exams, presentation, and class participation

50% from final exam

At least 75% class attendance will be required to be eligible for final exam

中期テイクホーム試験, プレゼンテーションや授業参加から50%
最終試験から50%

最終試験のため少なくとも75%のクラスの出席必要です。

Text Book:

Plant Physiology 4th edition. Eds. Taiz & Zeiger;
Sinauer Associates, INC; Sunderland, MA

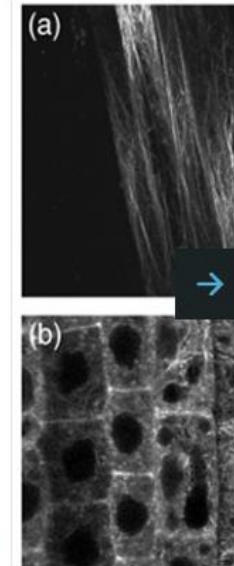
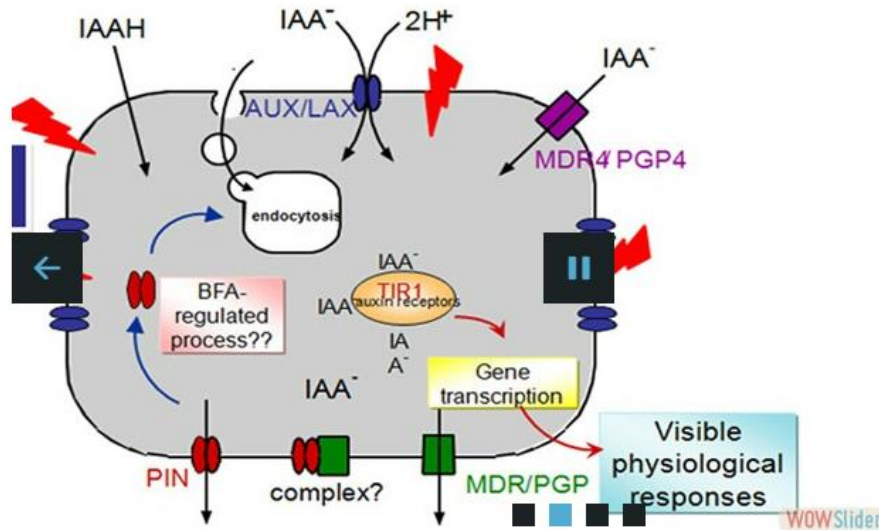


The Abidur Lab at Faculty of Agriculture, Iwate University

Plant Hormone Biology

日本語 岩手大学
Iwate University

The primary research interest of my lab lies in understanding the hormonal regulation of plant growth and development under optimum condition and various stresses. For this, we are primarily focusing on the plant hormone auxin, which influences plant behavior from embryogenesis to senescence and exhibits complex interactions with other hormones. To know more about our research please [click here](#)



Courses

Spring semester

Graduate course

[Plant Molecular Biology](#)
Course Number: LTA9

Undergraduate courses

[General Plant Biology](#)
Course Number: A105

Introductory Biology
Course Number: A007

Fall semester

[Plant Physiology lab](#)
Course Number: B120

[Journal Club](#)

Click here

LAB MOVIE

What's New

and protein trafficking has been published in Plants June 2021: Our work on auxin, actin and high temperature stress resp



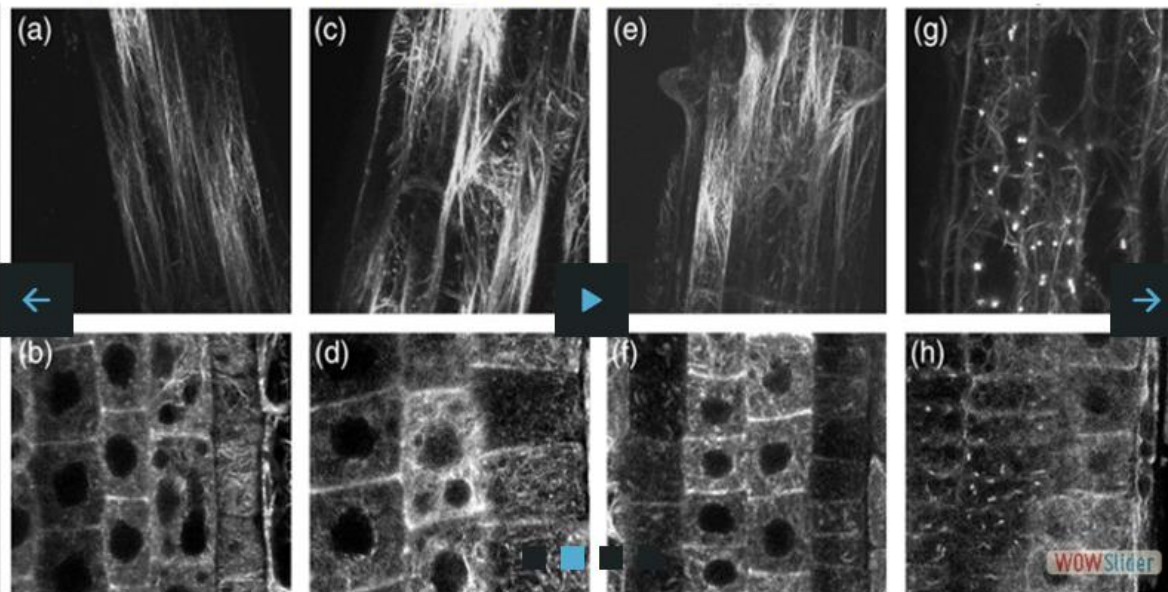
岩手大学農学部植物生命科学科一 アビドゥール研究室 植物ホルモン生物学

[ENGLISH](#)



[研究室動画](#)

本研究室の主な研究内容は、最適条件下のもと様々なストレスを加え、植物の成長および発達におけるホルモン制御機構を解明することです。このために、当研究室では主に植物ホルモンであるオーキシシンに注目しています。オーキシシンは、胚形成から老化への植物の挙動に影響を与え、他のホルモンと複雑な相互作用を示します。当研究室の研究についてより知りたい場合は、[ここをクリック](#)してください



授業

前期

修士課程:

植物分子生物学特論
時間割コード LTA9

学部

[General Plant Biology](#)
時間割コード A105

生物学入門
時間割コード A007

後期 **クリック**


植物生理学
時間割コード B116

Journal Club

ニュース

士課程を修了しました。おめでとうございます!!! 半澤 綾は博士課程を引き続きこの研究室で続ける予定です。パーピーンスマ 09132

Home Assignments

 Assignment #1

 Assignment #2

 Assignment #3


 Assignment #4

 Final Exam

General Plant Biology

(Course # A105)

 Weekly plan

 Lectures

[Introductory lecture](#)

[Plant and Plant Cells/植物および植物細胞](#)

[Plant Cell organelles-1/植物細胞オルガネラ-1](#)

[Plant Cell organelles-2/植物細胞オルガネラ-2](#)

[Cell cytoskeleton, Cell division/細胞骨格、細胞分裂](#)

[Water and Solute transport /水と溶質の輸送](#)

[Photosynthesis/光合成](#)

[Genetics/遺伝学](#)

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Week 2- April -27- Plant and Plant Cells/植物および植物細胞

Week 3- May-1- (Monday-Thursday class) Plant Cell organelles-1/植物細胞オルガネラ-1

Week 4- May 11- Plant Cell organelles-2/植物細胞オルガネラ-2 (Take Home Exam-1)/ (課題-1)

Week 5- May-18 - Cell cytoskeleton, Cell division-1/細胞骨格、細胞分裂-1

Week 6- May-25- Cell cytoskeleton, Cell division-2/細胞骨格、細胞分裂-2

Week 7- June-1- Water and Solute transport /水と溶質の輸送

Week 8- June-8- Photosynthesis-1/光合成-1 (Take-home exam -2)/(課題-2)

Week 9- June-15- Photosynthesis-2/光合成-2 Review class/レビュークラス

Week 10- June-22- Genetics-1/遺伝学-1 (Take Home Exam-3)/ (課題-3)

Week 11-June-29- Genetics-2/遺伝学-2

Week 12- July-6- No Class/休み

Week 13-July-13- Group Presentation on GMO/遺伝子組み換え作物に関するグループプレゼンテーション

Week 14-July-20- Review class/レビュークラス/Feedback on presentation/発表に関するフィードバック


Week 15-July-27- Summarized Final exam /まとめた最終試験

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50% from final exam

Home Assignment # 2- 06.12.08

Deadline of submission: by 4 pm of 06.19.08


Questions:

- 1) "Although water molecule has no net charge, it serves as an excellent solvent". Justify the statement.
- 2) Which part of the root participates in water transport with greater efficiency and why?
- 3) What is primary active transport system? Briefly describe it.
- 4) Describe one experiment by which two photochemical complexes were discovered.
- 5) Briefly describe the dark reactions of photosynthesis.

Instruction to students:


Choose any three questions from the above five questions and answer them in your own words. Don't copy and paste from within the deadline. Late submitting or copied assignments will not be graded.

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 Assignment #2

 Assignment #3


 Assignment #4

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50% from final exam

Instruction for Final Exam:

The exam will be an open-book type. You are allowed to bring and look any text, lecture notes etc. during the exam. You can bring your laptop to see the lecture notes but cannot use the internet. However, you cannot use cell phone, Iphone or Ipad. 30 questions have to be answered in 45 minutes. Students are expected to answer the questions in a few words or within a sentence. Don't forget to write your name and student number on the top of the question paper.

Date: July 27, 2023

Time : 9:00 am

Place: Lecture room #6

Best of luck with the exam!

**** If some body is unable to attend the exam on July 28 , you have to explain the reason and if you can satisfy me, I will allow you to take the final exam on a later date in my office.

最終試験の指示：

試験はオープンブックタイプになります。試験中は、テキストや講義ノートなどを持参して見ることができます。ノートパソコンを持参して講義ノートを見ることができますが、インターネットは使用できません。ただし、携帯電話、iPhone、iPadはご利用いただけません。45分で30問を答えないといけない。質問に数語または一文で答えてください。問題用紙の上部に名前と学生番号を書くことを忘れないでください。

日：7月27日

時間：9:00 am

会場：6番講義室

頑張ってください！

**** 7月28日に受験できない場合は、その理由を説明し満足できる場合は、後日、私のオフィスで最終試験を受けることができます。