

7th International Legume Conference
- Legume Systematics for Next Generation -



28th August - 2nd September 2018
Sendai City War Reconstruction Memorial Hall, Sendai, Japan

This publication accompanies the 7th International Legume Conference held at Sendai City War Reconstruction Memorial Hall for August 29 - September 2, 2018, Japan.

7th International Legume Conference
- Legume Systematics for Next Generation -
Program and Abstract Book

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Conference Logo

Japanese Wisteria taken from Japanese *KAMON* symbol called *Nobori-Fuji* (ascending Wisteria)

Preface

Welcome to Sendai! The aim of the 7th International Legume Conference (7ILC) is to provide the world legume researchers with opportunities to share the common time and experience by meeting up together, exchanging idea, and thinking about Legume Systematics fo Next Generation. We will do our best to furnish you with good *Omotenasi* (hospitality in Japanese). We wish this conference in Sendai would be an unforgettable ILC for all participants.

- 7ILC Organization committee -

People who work for 7ILC

Organization Committee

Tadashi Kajita (University of the Ryukyus),
Chairperson
Masayuki Maki (Tohoku University),
Vice Chairperson
Firouzeh Javadi (Kyushu University), Secretary
Koji Yonekura (Tohoku University), Treasurer
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Forestry & Fisheries Center)
Severino Garengo Salmo III (University of the
Ryukyus / Ateneo de Manila University)
Yui Kajita (University of the Ryukyus)
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Takahiko Kamiya (University of the Ryukyus)

Symposium Organizers and Chairpersons

(detail list in the text)

Anne Bruneau, Ashley N. Egan, Ben-Erik Van
Wyk, Bente B. Klitgård, Brigitte Marazzi, Colin
Hughes, Danilo Neves, Felix Forest, Firouzeh
Javadi, Jeff Doyle, Juliana Villela Paulino, Ken
Naito, Kojiro Takanashi, Leonardo Borges,
Luciano Paganucci de Queiroz, Manuel de la
Estrella, Milagros Leon Barrios, Mohammad
Vatanparast, Rowan Schley, Sachiko Isobe,
Simone de Pádua Teixeira, Steven Cannon,
Tadashi Kajita, Tania Maria de Moura, Tetsukazu
Yahara, Tingshunag Yi, Toby Pennington, Vidal
Mansano, and Yasuhiro Kubota

Support

Tropical Biosphere Research Center (TBRC),
University of the Ryukyus, Japan
Tohoku University
Sendai City
Inoue Foundation for Science
Kajima Foundation
Projects of JSPS

and All Participants to 7ILC

Conference Time Table

	28 Aug Tue	29 Aug Wed	30 Aug Thu	31 Aug Fri	1 Sept Sat	2 Sept Sun
8:30		8:30 Conference Venue and Registration Desk Open				
8:40						
8:50						
9:00		9:00 Information desk open	9:00 Conference venue and information desk open	9:00 - 11:00 (two options)	9:00 Conference venue open	
9:10						
9:20		9:20- 9:40 Opening remarks (by T. Kajita and T. Yahara)	9:20- 9:40 Flash Talk 2 (Chaired by Rowan Schley)	(1) Workshop: 4th floor lecture room at the Conference Venue. (organizers Yasuhiro Kubota and Felix Forest)	9:20- 9:40 Flash Talk 2 (Chaired by Tania Maria de Moura)	9:20- 9:40 Flash Talk 3 (Chaired by Danilo Neves)
9:30						
9:40		9:40 - 10:20 Plenary talk by Brigitte Marazzi (Chaired by Leonardo Borges)	9:40 - 10:20 Plenary talk by Tetsukazu Yahara (Chaired by Firouzeh Javadi)			
9:50						
10:00						
10:10						
10:20		10:20 - 10:50 Tea Break & Poster Session			10:20 - 10:50 Tea Break & Poster Session	
10:30						
10:40						
10:50		10:50 - 12:20 Legume Morphology: diversity and evolution (organized by Brigitte Marazzi; Juliana Villela Paulino; Leonardo Borges; Vidal Mansano; Simone de Pádua Teixeira)	10:50 - 12:20 Legume Diversity in Asia (organized by Tetsukazu Yahara; Tingshun ag Yi; Firouzeh Javadi)		10:50 - 12:20 Root to Tip Legume Phylogenomics: Building the Phylogenetic Foundations for Next Generation Legume Systematics (organized by Colin Hughes; Toby Penn-ington; Jeff Doyle)	10:50 - 12:20 Legume Evolutionary Genomics (organized by Steven Cannon; Sachiko Isobe; Ken Naito)
11:00						
11:10				Half day Excursion		
11:20						
11:30						
11:40				11:30 Start Sendai by two Buses. (max capacity 110 people)		
11:50						
12:00						
12:10		Conference Group Photo at the Hall				
12:20		12:20 - 13:30 (70 min) Lunch Break * Restaurants are in 5 min walk from the conference venue		12:30 Jouge Temple and surrounding area. Lunch and sight seeing.	12:20 - 13:30 (70 min) Lunch Break	
12:30						
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13:20						

	28 Aug Tue	29 Aug Wed	30 Aug Thu	31 Aug Fri	1 Sept Sat	2 Sept Sun
13:30		13:30 - 15:00 (cont.) Legume Morphology: diversity and evolution	13:30 - 15:00 Phylogenetic niche conservatism, biome switching, and adaptation in legume evolution (organized by Toby Pennington; Colin Hughes)	14:30 - 16:00 Visit a Whisky brewery.	13:30 - 15:00 (cont.) Root to Tip Legume Phylogenomics: Building the Phylogenetic Foundations for Next Generation Legume Systematics	13:30 - 15:00 Celebrating 40 years of legume systematics: the productive career of Gwilym P. Lewis (organized by Anne Bruneau; Luciano Paganucci de Queiroz)
13:40						
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16:00	16:00 Registration Desk and Information Desk Open Welcome Mixer at the Poster Hall	15:30 - 17:00 Evolution and systematics of subfamily Detarioideae (organized by Manuel de la Estrella; Bente Klitgaard; Anne Bruneau)	15:30 - 17:00 (cont.) Phylogenetic niche conservatism, biome switching, and adaptation in legume evolution	16:10 - 17:10 Iwamatsu Ryokan Onsen Hot spring.	15:30 - 17:15 Taxonomy, phylogeny and conservation of tribe Dalbergieae (organized by Mohammad Vatanparast; Yasuhiro Kubota; Bente B. Klitgård)	15:00 - 15:40 Plenary talk by Gwilym P. Lewis (Chaired by Anne Bruneau)
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		15:00 - 15:30 Tea Break & Poster session			15:00 - 15:30 Tea Break & Poster session	
		17:00 - 17:30 Tea Break & Poster session		17:30 - Buses start to Sendai.	17:15 - 17:45 Tea Break & Poster session	15:40 - 16:10 Tea Break & Poster Removal
		17:30 - 19:00 Diversity of African Legumes (organized by Ben-Erik Van Wyk)	17:30 - 19:00 Evolution and diversity of Legume - Soil Bacteria Symbiosis (organized by Milagros Leon Barrios; Kojiro Takanashi; Tadas hi Kajita)	17:30 - Conference Dinner at Iwamatsu Ryokan (a Japanese Style Spa Resort)	17:45 - 19:00 Evolutionary Diversification across the legume landscape: from order to genus (organized by Ashley N. Egan)	16:10 - 17:40 Wrap up session and discussion (Chaired by Anne Bruneau and Colin Hughes)
				19:30 Start to Sendai by bus		16:10 - 17:40 Wrap up session and discussion (Chaired by Anne Bruneau and Colin Hughes)
						Closing remarks (Tadashi Kajita)
						Clearanc of the conference venue by organization committee members

Talk Program by Date and Speaker

29th Aug (Wed)

9:40 - 10:20 **Plenary Talk 1**

(Chaired by Leonardo Borges)

Brigitte Marazzi

Extrafloral nectaries, legumes, and ants: a complicated relationship

10:50 - 12:20; 13:30 - 15:00

Legume Morphology: diversity and evolution

(Organizers: Brigitte Marazzi; Juliana Villela Paulino; Leonardo Borges; Vidal Mansano; Simone de Pádua Teixeira)

1. **Vidal de Freitas Mansano**
General intro and homage to Shirley Tucker
2. **Peter E Gasson**
Legume Wood anatomy: phylogenetic position and identification considerations in the context of the international timber trade, CITES and EU Timber Regulations.
3. **Anna V Stepanova**
Wood anatomy of Genisteae and allied tribes
4. **Abubakar Bello**
Morphological evidence for introgressive hybridization in the genus *Psoralea* L. (Psoraleeae, Fabaceae)
5. **Aleksandar Radosavljevic**
Morphoanatomy of extrafloral nectaries in *Cynometra* (Detarioideae)
6. **Ana M Gonzalez**
Extrafloral nectaries in Fabaceae: filling gaps in structural and anatomical diversity in the family
7. **Pedro Hiroshi Pereira Murashima**
Glands in *Cajaninae* Benth. subtribe (Leguminosae-Papilionoideae - Phaseoleae): distribution, structure, and ultrastructure
8. **Florian Jabbour**
Diversity and evolution of habit and fruit morphology in *Desmodieae* (Papilionoideae)
9. **Juliana Villela Paulino**
Division of labour hypothesis related to heteromorphic androecium in Leguminosae
10. **Vidal de Freitas Mansano**
Floral morphology in Leguminosae based on an ontogenetic perspective.
11. **Leonardo Borges**
Building an international and collaborative morphological framework for Leguminosae

15:30 - 17:00

Evolution and systematics of subfamily Detarioideae

(Organizers: Manuel de la Estrella; Bente Klitgaard; Anne Bruneau)

1. **Rowan Schley**

Genomics of reproductive isolation following floral divergence: gene flow and speciation in *Brownea* (Detarioideae, Leguminosae)

2. **Le Min Choo**

Phylogeny, biogeography and conservation status of the *Daniellia* clade (Leguminosae: Detarioideae) in Africa and Madagascar

3. **Bente Klitgaard**

Is Amazonia a 'museum' for Neotropical trees? The evolution of the *Brownea* clade (Detarioideae, Fabaceae)

4. **Rafael Barbosa Pinto**

The *Hymenaea* clade: Systematics of the Linneaus's marriage leaflets group (Leguminosae, Detarioideae)

5. **Fabio Junior Kochanovscki**

Floral ontogeny of the *Hymenaea* clade (Detarioideae - Leguminosae)

6. **Manuel de la Estrella**

Members of the *Berlinia* clade harbour extensive flower diversity with multiple transitions towards petal type and number reduction

17:30 - 19:00

Diversity of African Legumes

(Organizer: Ben-Erik Van Wyk)

1. **Michelle Van der Bank**

Systematics of *Tephrosia* and allies (Millettieae, Fabaceae)

2. **Annah Moteetee**

Vegetative and reproductive morphological variation in African endemic genera of the tribe Phaseoleae

3. **Arthur F. Boom**

Diversification of the African genus tree *Brachystegia*

4. **Ben-Erik Van Wyk**

The diversity and multiple uses of southern African legumes – a review

5. **Abdulwakeel Ayokun-nun Ajao**

Phylogeny and taxonomic revision of southern Africa species of *Rhynchosia* type section *Rhynchosia* (*Cajaninae*, Phaseoleae, Fabaceae)

6. **Mikhail Yu. Goncharov**

Molecular phylogeny of the tribe Baphieae (Fabaceae) based on the *matK* gene sequences

30th Aug (Thu)

9:20 - 9:40 **Flash Talk 1** (Chaired by Rowan Schley)

1. **Yui Kajita** (Poster 1)
Crossing around the world: Post-pollination reproductive isolation of a pantropical legume species, *Canavalia rosea*
2. **Saeid Chavoshi** (Poster 2)
Effect of irrigation halt, phosphorus and potassium solubilizing bacteria on yield and yield components of red bean (*Phaseolus vulgaris* cv. Goli)
3. **Benjamin Dzorgbenyui Kofi Ahiabor** (Poster 3)
Response of groundnut (*Arachis hypogaea* L) to combined application of rhizobium inoculant and phosphorus fertilizer in a Luvisol
4. **Boon-Chuan Ho** (Poster 4)
Leguminosae for the Flora of Singapore

9:40 - 10:20 **Plenary Talk 2**
(Chaired by Firouzeh Javadi)

Tetsukazu Yahara

Legume diversity assessment as an example of plant diversity assessment in SE Asia

10:50 - 12:20

Legume Diversity in Asia

(Organizers: Tetsukazu Yahara; Tingshunag Yi; Firouzeh Javadi)

1. **Yasuhiro Kubota**
Global-scale diversity estimate of woody Leguminosae species: disentangling taxonomic data bias and macroecological patterns
2. **Jer-Ming Hu**
Phylogenetics and evolution of the Callerya Clade (Millettieae)
3. **Tieyao Tu**
A phylogenetic re-evaluation of *Phanera* sensu lato (Leguminosae – Cercidoideae)
4. **Bo Xu**
ITS non-concerted evolution and rampant hybridization in the legume genus *Lespedeza* (Fabaceae)
5. **Gregory John Kenicer**
Niche modelling in East Asian *Lathyrus* reveals wider biogeographical context in the genus.
6. **Koji Takayama**
Post-glacial expansion and admixture effects on the intra-oceanic genetic structure of widespread sea-dispersed plants *Vigna marina* in the Asia-Pacific region

13:30 - 15:00; 15:30 - 17:00

Phylogenetic niche conservatism, biome switching, and adaptation in legume evolution

(Organizers: Toby Pennington; Colin Hughes)

1. **Tristan Charles-Dominique**
Environmental barriers between biomes: how hard are they to overcome and how do trees contribute to create them?
2. **Daniilo Neves**
Niche evolution in South American trees and its consequences
3. **Marcelo Simon**
The evolution of South American savanna plants: biome shifts and adaptations to fire
4. **Anne Bruneau**
Patterns of biome evolution, continental shifts and species diversification in Cercidoideae, Detarioideae and Dialioideae
5. **Victoria Cabrera**
The interplay between climatic niche and life history evolution in *Lupinus* – behind the scenes of a spectacular adaptive radiation
6. **Daniel John Murphy**
Niche evolution in Australia *Acacia*
7. **Jens J. Ringelberg**
Caesalpinoid legume biome conservatism across the seasonally dry tropics
8. **Jonathan James Lloyd**
What do legumes need to evolve to live under erratic rainfall regimes?

17:30 - 19:00

Evolution and diversity of Legume - Soil Bacteria Symbiosis

(Organizers: Milagros Leon Barrios; Kojiro Takanashi Tadashi Kajita)

1. **Milagros Leon-Barrios**
Wide diversity of the endemic *Lotus* and their symbiotic rhizobia in the Canary Islands: an overview
2. **Masaru Bamba**
Lotus species in Canary Islands and nodulating bacterial communities in their habitats
3. **Shusei Sato**
Comparative genome analysis of rhizobia associated with Japanese accessions of *Lotus japonicus*
4. **Kojiro Takanashi**
Dispersal of *Oxytropis*-rhizobia symbiosis from the Arctic to Japanese alpine region
5. **Seishiro Aoki**
From Beta- to Alpha-proteobacteria: The origin and evolution of rhizobial nodulation genes *nodJ*
6. **Kiwamu Minamisawa**
Experimental evolution of bradyrhizobial symbiosis island by symbiotic incompatibility

1st Sept (Sat)

9:20 - 9:40 **Flash Talk 2**

(Chaired by Tania Maria de Moura)

1. **Yan Wang** (Poster 5)
Light not soil explains savanna-forest boundary: a case study for two bauhinia species.
2. **Shiho Kato** (Poster 6)
Identification and analysis of drifted leguminosae seeds from a five-year survey on Miyako-jima, Okinawa, Japan
3. **Tatiana E. Kramina** (Poster 7)
Lotus and Dorycnium: phylogenetic relationships and position of problematic species
4. **Ozan - Şentürk** (Poster 8)
Niche modelling and phylogenetic position in Turkish Gonocytisus L. Papilionoideae.

9:40 - 10:20 **Plenary Talk 3**

(Chaired by Colin Hughes)

Erik Koenen

Phylogenomic complexity and legume evolution in deep time

10:50 - 12:20; 13:30 - 15:00

Root to Tip Legume Phylogenomics: Building the Phylogenetic Foundations for Next Generation Legume Systematics

(Organizers: Colin Hughes; Toby Pennington Jeff Doyle)

1. **Jeff J. Doyle**
Genomics, transcriptomics, and more: The making of a model non-model legume system, perennial Glycine (Phaseoleae)
2. **Manuel de la Estrella**
Integrating phylogenomics and population genetics using target enrichment in Detarioideae, a group of ecologically dominant tropical African trees
3. **Ting-Shuang Yi**
Plastid phylogenomic insights into the evolution of legumes
4. **Jian-Jun Jin**
Phylogeny and plastome evolution of the legume family (Leguminosae).
5. **C. Donovan Bailey**
Phylogeny and polyploidy in Leucaena resolved using genome-scale data from plastid, mitochondrial, and nuclear genomes
6. **Toby Pennington**
Inga: using a next-generation hybrid capture phylogenomics method in a case study of evolutionary radiation in tropical rain forest trees

7. **Colin Hughes**

Pleistocene glacial cycles, species pumps, explosive species diversification and rapid adaptive evolutionary radiation of Lupinus (Leguminosae) in the high elevation Andes

8. **Ashley N Egan**

Target-enrichment phylogenomics improves the resolution of legume lineages at generic, tribal, and subfamily levels.

9. **Mohammad Vatanparast**

Comparison of three methods for targeted enrichment bait design in legumes

10. **Felix Forest**

A genus-level phylogenetic tree of legumes: preliminary results using an angiosperm-wide targeted enrichment approach

15:30 - 17:15

Taxonomy, phylogeny and conservation of tribe Dalbergieae

(Organizers: Mohammad Vatanparast; Yasuhiro Kubota; Bente B. Klitgård)

1. **Danilo Neves**

Niche evolution, ecological limits and the macroecology of Dabergoid biodiversity

2. **Megan Barstow**

Overcoming challenges when producing conservation assessments for legume trees

3. **Bente Klitgaard**

Is the timber tree Pterocarpus rohrii one or ten species? Revision of a polyphyletic species complex

4. **Mohammad Vatanparast**

Molecular phylogeny and conservation of Dalbergia L.f. species

5. **Tania Maria De Moura**

A new circumscription of Nissolia (Leguminosae – Papilionoideae – Dalbergieae).

6. **Luisa Maria de Paula Alves Bezerra**

Secretory structures evolution and phylogeny of Dalbergioid Adesmia clade (Leguminosae, Papilionoideae, Dalbergieae)

7. **Tieyao Tu**

The plastid genomes of Dalbergia odorifera T.C. Chen and D. tonkinensis Prain, and their utility in wood identification

17:45 - 19:00

Evolutionary Diversification across the legume landscape: from order to genus

(Organizers: Ashley N. Egan)

1. **Lei Duan**

Molecular phylogeny of Cladrastis clade and resurrection of Platyosprion (Leguminosae: Papilionoideae)

2. **Robabeh Shahi Shavvon**

Improving phylogenetic resolution in the rapidly evolving genus Oxytropis (Fabaceae) using Anchored Hybrid Enrichment

3. **Qiang Lai**
Phylogeny of Fabales inferred from plastid genome sequences
4. **Luísa M. P. A. Bezerra**
Systematics studies in the genus *Rhynchosia* Lour. (Leguminosae, Papilionoideae) with emphasis on species occurring in Brazil
5. **Italo Antonio Cotta Coutinho**
Secretory structures in relation to the phylogeny and taxonomy of the genus *Chamaecrista*

2nd Sept (Sun)

9:20 - 9:40 Flash Talk 3

(Chaired by Danilo Neves)

1. **Yoshihisa Suyama** (Poster 9)
MIG-seq and multiplexed DNA barcoding: an efficient combination for molecular phylogenetic analysis
2. **Sontosh Chandra Chanda** (Poster 10)
Genetic variability, heritability and genetic advance determination in *Sesbania* genotypes by using the multivariate analysis
3. **Cengiz Toker** (Poster 11)
Phenotyping for cold tolerance in RILs derived from an interspecific cross between *Cicer arietinum* L. and *C. reticulatum* Ladiz.

9:40 - 10:20 Plenary Talk 4

(Chaired by Sachiko Isobe)

Ken Naito

Genomics of salt tolerance in wild species of genus *Vigna*

10:50 - 12:20

Legume Evolutionary Genomics

(Chaired by: Steven Cannon; Sachiko Isobe; Ken Naito)

1. **Steven B Cannon**
Genome evolution in the legumes: common patterns, exceptions, and a candidate for the "ur-legume" genome.
2. **Jeff J. Doyle**
New insights on the origin of nodulation from genomic sequences of nodulating and non-nodulating legumes and other rosids
3. **Tomomi Wakabayashi**
Genome-wide association study for the differences in flowering time variation under two conditions in *Lotus japonicus* in Japan
4. **Pallavi Sinha**
Genome-wide epigenetic regulation in realizing heterosis in pigeonpea (*Cajanus cajan* L.)

13:30 - 15:00

Celebrating 40 years of legume systematics: the productive career of Gwilym P. Lewis

(Organizers: Anne Bruneau; Luciano Paganucci de Queiroz)

1. **Anne Bruneau**
Celebrating 40 years of legume systematics: the productive career of Gwilym P. Lewis
2. **Tania Maria De Moura**
Biology and Evolution of pantropical *Mucuna* Adans.
3. **Colin Hughes**
Generic delimitation in legumes - commentary and reflections on monophyly
4. **Ana Paula Fortuna Perez**
Phylogeny and Secretory Structure Evolution of the Subtribe *Cajaninae* (Leguminosae, Papilionoideae, Phaseoleae), with emphasis on neotropical species
5. **Edeline Gagnon**
The *Caesalpinia* group as a model for understanding biogeographical patterns of evolution

15:50 - 15:40 Plenary Talk 5

(Chaired by Anne Bruneau)

Gwilym Peter Lewis

From gardening to phylogenomics via taxonomy: a 45-year legume retrospective

16:10 - 17:20

Wrap-up and Closing Session

(Chaired by **Anne Bruneau** and **Colin Hughes**)

Poster Program by Presentation type and Presenter

Flash Talk and Poster

1. **Yui Kajita** (Flash 1, 30 Aug.)
Crossing around the world: Post-pollination reproductive isolation of a pantropical legume species, *Canavalia rosea*
2. **Saeid Chavoshi** (Flash 1, 30 Aug.)
Effect of irrigation halt, phosphorus and potassium solubilizing bacteria on yield and yield components of red bean (*Phaseolus vulgaris* cv. Goli)
3. **Benjamin Dzorgbenyui Kofi Ahiabor** (Flash 1, 30 Aug.)
Response of groundnut (*Arachis hypogaea* L) to combined application of rhizobium inoculant and phosphorus fertilizer in a Luvisol
4. **Boon-Chuan Ho** (Flash 1, 30 Aug.)
Leguminosae for the Flora of Singapore
5. **Yan WANG** (Flash 2, 1 Sept.)
Light not soil explains savanna-forest boundary: a case study for two bauhinia species.
6. **Shiho Kato** (Flash 2, 1 Sept.)
Identification and analysis of drifted leguminosae seeds from a five-year survey on Miyako-jima, Okinawa, Japan
7. **Tatiana E. Kramina** (Flash 2, 1 Sept.)
Lotus and Dorycnium: phylogenetic relationships and position of problematic species
8. **Ozan ŞENTÜRK** (Flash 2, 1 Sept.)
Niche modelling and phylogenetic position in Turkish *Gonocytisus* L. Papilionoideae.
9. **Yoshihisa Suyama** (Flash3, 2 Sept.)
MIG-seq and multiplexed DNA barcoding: an efficient combination for molecular phylogenetic analysis
10. **Sontosh Chandra Chanda** (Flash3, 2 Sept.)
Genetic variability, heritability and genetic advance determination in *Sesbania* genotypes by using the multivariate analysis
11. **Cengiz Toker** (Flash3, 2 Sept.)
Phenotyping for cold tolerance in RILs derived from an interspecific cross between *Cicer arietinum* L. and *C. reticulatum* Ladiz.
14. **Sujit Kumar Mishra**
Improvement of bruchid pest resistance in *Cajanus cajan* using cyto-morphological and DNA marker techniques
15. **Mahtab Moghaddam**
Evolutionary implications of a plastid hypermutable region in the inverted repeat lacking clade of legumes with special reference to the tribe Fabeae
16. **Cengiz Toker**
Leaf miner (*Liriomyza cicerina* Rond.) resistance in RILs derived from an interspecific cross between chickpea (*Cicer arietinum* L.) and its progenitor (*C. reticulatum* Ladiz.)
17. **Md. Mozahidul Islam**
SCREENING OF COWPEA (*Vigna unguiculata* (L.) Walp.) GENOTYPES FOR SALT STRESS TOLERANCE
18. **Marcelino delArco-Aguilar**
The Symbiosis Rhizobia-Spartocytisus supranubius, an endemic legume from the high mountain ecosystem of Tenerife (Canary Islands)
19. **Cengiz Toker**
Nutritional contents of common bean landraces in comparison to modern varieties
20. **Ana Paula Fortuna-Perez**
Distribution, morphology and histochemistry of internal secretory structures in *Poiretia* Vent. (Leguminosae, Papilionoideae, Dalbergieae) as support to taxonomy
21. **Italo Antonio Cotta Coutinho**
Root and stem wood anatomy of *Poincianella microphylla* (Mart. ex G. Don) L.P. Queiroz
22. **Leopoldo Clemente**
Baratto Anatomical and chemical characterization of the reddish exudate of Brazilian Swartzia species (Fabaceae)
23. **Yoshi Kikuchi**
Molecular phylogeography of kudzu (*Pueraria lobata*) and its monophagous beetle (*Mesalcidodes trifidus*).
24. **Tomoyuki Nemoto**
Geographical distribution of root nodule bacteria associated with *Trifolium lupinaster* in Japan

Poster Only

12. **Kiran Mani Basnet**
GENETIC VARIATION AMONG THE LOCAL NEPALESE AND EXOTIC GENOTYPES OF MUNGBEAN (*Vigna radiata* L. Wilczek)
13. **Sujit Kumar Mishra**
Marker assisted breeding for genetic improvement of bruchid resistance in pigeonpea, *Cajanus cajan* (L.): progress and prospects
25. **Takahide Kurosawa**
Flower dimorphism in Persian silk tree, *Albizia julibrissin* (Fabaceae, Mimosoideae).
26. **Vidal de Freitas Mansano**
The atypical flower of *Camoensia scandens* (Leguminosae: Papilionoideae): floral ontogeny and scent glands
27. **Norihisa Wakita**
Gain and loss of seed buoyancy in genus *Entada* suggested by chloroplast phylogeny

28. **Ana María Planchuelo**
Evaluation of native and cultivated Leguminosae with ethnobotanical values in relation with the flora of Córdoba, Argentina

29. **Ana Paula Fortuna-Perez**
Stylosanthes Sw. (Fabaceae – Papilionoideae – Dalbergieae) in Brazilian Flora 2020

30. **Boguslav Kurlovich**
Vavilov's concept of the species as a system

31. **Rong Zhang**
Plastid Phylogenomics offers resolution of a phylogenomic framework of the Leguminosae

Symposium Talk and Poster

32. **Takashi Yamamoto** (Legume Asia, 30 Aug.)
Post-glacial expansion and admixture effects on the intra-oceanic genetic structure of widespread sea-dispersed plants *Vigna marina* in the Asia-Pacific region

32. **Shusei Sato** (Soil Bacteria, 30 Aug.)
Comparative genome analysis of rhizobia associated with Japanese accessions of *Lotus japonicus*

33. **Seishiro Aoki** (Soil Bacteria, 30 Aug.)
From Beta- to Alpha-proteobacteria: The origin and evolution of rhizobial nodulation genes *nodIJ*

34. **Jian-Jun Jin** (Phylogenomics, 1 Sept.)
Phylogeny and plastome evolution of the legume family (Leguminosae).

35. **Megan Barstow** (Dalbergieae, 1 Sept.)
Overcoming challenges when producing conservation assessments for legume trees

36. **Lei Duan** (Diversification, 1 Sept.)
Molecular phylogeny of Cladrastis clade and resurrection of Platysprion (Leguminosae: Papilionoideae)

37. **Qiang Lai** (Diversification, 1 Sept.)
Phylogeny of Fabales inferred from plastid genome sequences

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Maps

Road Map of Sendai City



Access to the Conference Venue (Sendai City War Reconstruction Memorial Hall)

- Geographical coordinate: 38.2607175N, 140.8671887E
- (1) Omachi Nishi-Koen is the nearest subway station to the conference venue. 6 min walk from the station.
- (2) From Hirose-Dori subway Station, 10 min walk. About 5 min from Ichibancho-Dori Arcade.
- (3) From Sendai Railway Station: 25 min walk. A half of the way (shaded on the map) to the venue is in a shopping road in arcades.

Access to the Herbarium and Botanical Garden, Tohoku University.

- The main entrance of the Botanical Garden is in the Southern end of the Kawauchi Campus of Tohoku University.
- (4) About 10 min walk through the campus from Kawauchi Subway Station.
- The Botanical Garden area is called Aobayama, which is registered to Natural Monument of Japan because of its rich nature.
- The Botanical Garden open to public from 9:00 to 17:00 and closed on Monday. For the courtesy of the Botanical Garden, participants of 7ILC can enter the garden for free from 27th Aug. to 3rd Sept. Please show your Conference Name Card (with the logo of 7ILC) at the entrance gate.
- To visit the Herbarium (TUS), you need to contact with Dr. Koji Yonekura, the curator of the herbarium and get appointment before you visit. Please send inquiry to Dr. Koji Yonekura <yonekura@m.tohoku.ac.jp>.

Sendai City War Reconstruction Memorial Hall



* (No Entry to the shaded area of the Conference Venue)

Notices on the conference venue and Presentation

(1) General

1. Do Not Smoke in the Conference Hall
2. Do Not Consume Foods and drinks in the Conference Hall.
3. Do Not bring wet umbrella into the Conference Hall. You need to put wet umbrellas into the plastic bag provided by the conference organizers.
4. Cloak is available at the Poster session hall on BF1 in the following schedule:
28th Aug: 16:00 - 19:00
29th - 30th Aug., 1st Sept. 9:00 - 19:00
2nd Sept. : 9:00 - 17:30
We don't accept valuables at the cloak. We don't owe any responsibility for the damages on luggages deposited at the cloak.

(2) Talk Presentation at the Conference Hall (2F)

Talks (Plenary, Symposium and Flash Talk)

1. We accept only PowerPoint (.ppt), Keynote, and Portable Document Format (.pdf) for Talks at the Conference Hall.
2. At the Conference Hall, we will prepare a computer running Microsoft Windows®, and one running Macintosh OS X. Both of them are connected to a digital projector.
Speakers will not use their own laptops for their presentations.
3. Microsoft PowerPoint for Windows, PowerPoint, and Keynote for Macintosh and Adobe Acrobat Reader for both Windows and Macintosh are available for your talks.
4. Speakers have to submit the presentation file at least **1 day before your scheduled presentation** to the Presentation Desk at the Registration Desk. You can preview your presentation at the desk and can make minor adjustments if necessary.
5. Presentation files will only be accepted on a flash drives/memory sticks that plug into a standard USB port.
6. We delete all presentation files from the computers after the session.
7. Symposium organizers and chairpersons have the responsibility to determine the talk length and to finish the symposium within the time given to it.
8. Time length for most of sessions are as followings (slight modifications in some sessions:)
 1. Plenary talk: 40 minutes including time for questions
 2. Symposium: One slot is 90 minutes including time for questions
 3. Flash Talk: One session is 20 minutes. One talk is four minutes.

Symposium Talks

1. Symposium organizers have the responsibility to complete the session within the scheduled time.
2. Generally, a symposium is for 90 min with six talks. Each talk is for 15 min including times for questions. For some symposia with less or more than six talks, symposium organizers determine the talk length.
3. Speakers have to submit the presentation files according to the instruction above

Flash Talks

1. A Flash Talk is an oral presentation for **strictly four minutes** with a **maximum of four slides**.
2. Question time is not prepared in the four minutes.
3. When the four minutes pass, the speaker has to stop the presentation and go down from the stage.
4. Speakers have to follow the direction of the chairperson.
5. Speakers have to submit the presentation files according to the instruction above.

(3) Poster at the Exhibition Hall (B1F)

Preparation of Posters

1. The maximum size of a poster is A0 (841×1189 mm) printed in portrait format (not landscape format).
2. Text must be in English.
3. The title should be the same as the one submitted and confirmed by the presenter.
4. The poster should be made of a material that is easy to fix to a poster board with push pins
5. All authors (except for ePoster Participants) must print their posters by themselves, and bring them to the poster presentation space.

Presentation at the Poster Exhibition Hall

1. Posters can be placed on the respective boards from the time of Welcome Mixer (16:00 - 19:00, on August 28th) or in the morning 29th Aug. for 8:30 - 9:10.
2. The poster should be put on the board from the morning of 29th August to the evening of 2nd Sept.
3. The poster presentation ID will be provided at the reception desk or on the conference web page on 29th Aug.

4. The Poster Sessions at 7ILC is at the same time of Tea Breaks during the five days. See the Time Table for the detail time schedule.
5. Presenters can specify the time for their presentation on the Poster board.
6. Presenters can also explain their posters to the audience at Welcome Mixer and Lunch breaks.
7. The necessary equipment (like adhesive tape) for setting up the poster will be provided at the Poster Exhibition Hall.
8. Please note that it is the authors' responsibility to put and remove the poster at the Poster Exhibition hall of 7ILC.
9. Posters must be removed by 16:00 on 2nd September. Any materials that are left after 17:00 on the day will be thrown away.

(4) Information Counter by SenTIA

(On 28th, 29th and 30th August)

The Sendai Tourism, Convention and International Association (SenTIA) will kindly open an Information Counter for participants at the Conference venue. They will provide general information and helps to participants for tourism, activities, and transportation in Sendai and Tohoku area. The counter will only open on the following schedule, so, don't miss visiting them.

28th Aug: 16:00 - 18:00 at the Welcome Mixer

29th Aug: 9:00 - 17:00 at the information Desk on the 2nd Floor

30th Aug: 9:00 - 17:00 at the information Desk on the 2nd Floor



(5) WiFi Internet Connection

Internet connection by WiFi is available by a courtesy of the Sendai City War Reconstruction Memorial Hall . Please try to wifi connection with using the SSID: **kinenkan0201** and security code **sensai0201**.

(6) Group Photo

We take a group photo at the conference hall at 12:10 on 29th Aug. We expect all participants will be in the photo.

Plenary Speakers

Dr. Brigitte Marazzi

Natural History Museum of Canton Ticino, Switzerland



Brigitte Marazzi has been working with legumes for a long time. Her PhD project at the University of Zürich, Switzerland, which she defended in 2007, was on the caesalpinoid genus *Senna*. Although the focus was on floral symmetries, she soon discovered the extrafloral nectaries, which became the focus of her 4 year-long postdoctoral time at the University of Arizona, in Tucson (US). To understand extrafloral nectaries in *Senna*, she started to explore them in the legume family. Fascinated by the incredible diversity she was unravelling, she became interested in the study of morphological evolution.

While she worked for almost 3 years in Argentina at the Instituto de Botánica del Nordeste in Corrientes, she extended her research to include ecological aspects at the community level. She also formed and coordinated the Legume Morphology Working Group and the two legume morphology meetings in Brazil. After she returned to Switzerland in 2015, the group merged with the Legume Phylogenetic Working Group.

Currently, she works at the Natural History Museum of Canton Ticino and the National Data and Information Center on the Swiss Flora. She mainly deals with topics in conservation of endangered native species and monitoring of invasive alien species but still continues her research on extrafloral nectaries in and beyond legumes, and keeps in touch with the legume systematics community as the editor of the Bean Bag Newsletter.

Talk title: Extrafloral nectaries, legumes, and ants: a complicated relationship (Wednesday, August 29)

Prof. Tetsukazu Yahara

Kyushu University, Japan



Tetsukazu Yahara started his research from biosystematics of some agamospermous plant groups in 1980s and then made efforts to elucidate costs and benefits of sexual and asexual reproduction in the Eupatorium-geminivirus system. He discovered high evolutionary rate and high genetic diversity of geminiviruses infecting wild host plants, and higher infection frequencies in asexual lineages. He also studied the evolution of various sexual systems in flowering plants including cleistogamy and gynodioecy, and the evolution of diurnal and nocturnal pollination systems in *Hemerocallis* and *Lilium*. Recently, he worked in some

international programs including DIVERSITAS and GEO BON and since 2009 he has been a co-chair of AP BON (Asia-Pacific Biodiversity Observation Network). From 2011 to 2015, he directed a project “Integrative Observations and Assessments of Asian Biodiversity” sponsored by the Ministry of Environment, Japan in which more than 100 researchers joined. In this project and a subsequent project on plant diversity, he is collaborating with SE Asian botanists to record all the vascular plant species growing within 5m x 100m plots placed in candidate hot spots of plant diversity in SE Asia. He and his collaborators have accumulated more than 160,000 herbarium specimens with DNA samples, and DNA barcoding of those specimens is in progress.

Talk title: Legume diversity assessment as an example of plant diversity assessment in SE Asia (Thursday, August 30)

Dr. Erik Koenen

University of Zurich, Switzerland



Erik Koenen is a PhD candidate at the Institute of Evolutionary and Systematic Botany (ISEB) at the University of Zurich, where he works in the group of Dr. Colin Hughes. During his MSc studies, at the National Herbarium of the Netherlands, Wageningen branch (WAG) and Wageningen University, he completed a taxonomic revision of the African Meliaceae species formerly included in the Neotropical genus *Guarea* and then went on to work on molecular phylogenetics and biogeography of Meliaceae. Upon moving to Zurich he started working on macro-evolution and phylogenomics of mimosoid legumes (formerly subfamily Mimosoideae), and has spent the last few years also working on the phylogenomics of the origin and early evolution of the Leguminosae. His work on mimosoids involved the

development of hybrid capture target loci sets, and the same method has subsequently been applied to design targets in diverse taxonomic groups. He remains having a strong interest in herbarium taxonomy and is focusing on the genus *Albizia* and allies with the aim to redefine generic boundaries and to complete a taxonomic revision of the African and Asian species in the genus.

Talk title: Phylogenomic complexity and legume evolution in deep time (Saturday, September 1)

Dr. Gwilym P. Lewis

Royal Botanic Gardens, Kew, UK



Gwilym P. Lewis (PhD) is the legume research leader in the Comparative Plant and Fungal Biology Department at the Royal Botanic Gardens, Kew, where he has worked since 1974. He is a plant systematist specialising in the taxonomy, biology and geography of legumes in Latin America. He has travelled and collected widely across the Americas. Floristic studies have focused on Brazil, and Ecuador (he spent two years, 1996-1998, living in Loja, southern Ecuador). He has published 235 scientific papers and eight books. His publications include taxonomic revisions and monographs, evolutionary studies, and research on reproductive biology, floral anatomy, phytochemistry and biogeography. Monographic work has focused on the genus *Caesalpinia* and he has

revised several smaller genera in the mimosoid clade and the Papilionoideae.

Gwilym helped organise the first International Legume Conference at Kew in 1978 and has been a co-organiser or major contributor to the six subsequent international conferences which have resulted in 12 proceedings volumes under the series title: *Advances in Legume Systematics*. He set up the UK Legume Working Group in 1998 and co-founded the International Legume Phylogeny Working Group in 2010, which in 2017 published a new six subfamily classification of the legumes.

Talk title: From gardening to phylogenomics via taxonomy: a 45-year legume retrospective (Sunday, September 2)

Dr. Ken Naito

National Agriculture and Food Research Organization, Japan



Ken Naito has been working on genomics of wild *Vigna* species for the last 8 years. As a PhD student and a postdoctoral fellow in University of Georgia, he worked on a bursting transposable element in rice. During that time he recognized the power of whole genome analyses with next generation sequencers. Then he joined Genetic Resources Center in National Agriculture and Food Research Organization, Japan. Although he was expected to work on genetics of domestication in *Vigna* crops (cowpea, azuki bean, mung bean, black gram, etc.), he fell in love with the great diversity of wild *Vigna* species. So he launched a genome project with his colleagues to sequence the whole genomes of 10 wild species. He spent almost 5 years until he finished this project. His

focus is now salt tolerance of wild *Vigna* species, where several species have independently acquired salt tolerance. By genetic analysis and transcriptomic study, he is trying to elucidate evolution and application of salt tolerance.

Talk title: Genomics of salt tolerance in wild species of genus *Vigna* (Sunday, September 2)

Workshop, Excursion, Dinner on 31st Aug.

On 31st Aug, we have a workshop, excursion and conference dinner in the following schedule.

Summary of the day program

9:00 11:00	(1) Workshop on "Big-data based natural history science: exploring the chance of collaboration" (tentative title) at: the 4th Floor of the Conference Venue. We will place sign boards on the 4th floor.	(2) Botanical Garden tour at Tohoku University guided by Koji Yonekura. Participants need to come to the main gate of the garden by themselves (see the map (page 2)).
	(Participants to the Excursion move to the meeting point)	
11:30 17:30	(3) Excursion: Buses start from the Meeting points to visit Sakunami area for Historical place, Whisky brewery, and Japanese Hot Spring.	
	Conference Dinner (registration necessary) (** If you didn't attend the excursion, you need to come to Sakunami by train. Train schedule is in the text **)	(Participants who don't attend to the Conference Dinner)
17:30 19:30	(4) Conference Dinner at the Iwamatsu Ryokan Onsen Hotel. Bust start to Sendai at 19:30. Arrival time at Sendai City about 20:30	Bus start to Sendai. Arrival time at Sendai City area about 18:20 and Sendai Station about 18:30.

(1) Workshop on Big-Data Based Natural History Science

Organizers: Yasuhiro Kubota and Felix Forest

9:00 - 11:00 on 31st August, 2018

Lecture room on the 4th Floor of the Sendai City War Reconstruction Memorial Hall

(No registration is necessary)

During the past few years, Big-Data on plant species occurrence data, functional trait/life form information, and genetic diversity data have been accumulated. These data are expected to open new windows for Natural History Science. Individual projects have started in parallel focusing on different taxonomical, regional and ecological scale, and Global Scale integration is undoubtedly necessary. Yasuhiro Kubota has completed global-scale occurrence data for woody plant species and is now estimating tree species

richness. He is also trying to explore macro-scale diversity patterns along geographical gradients. In this workshop, by inviting Felix Forest as a co-organizer, he is going to discuss the idea of Global Scale Big Data analyses. All people who are interested in Big-Data based natural history are invited to the workshop. Detail program of the workshop will be announced during the first two days of the conference. The JSPS Program supports this workshop for Advancing Strategic International Networks to Accelerate the Circulation of Talented Researchers (No. S2903 to Y.K.).

(2) A short tour to the Botanical Garden, Tohoku University

Coordinator: Koji Yonekura

9:00 - 11:00 on 31st August, 2018

Main entrance of the Botanical Garden, Tohoku University (see Map on Page 2)

(No registration is necessary)

The Tohoku University Botanical Garden was founded for research and education in 1958. The area is covering about 490,000 square meters on Mt. Aobayama, have been conserved for 400 years from the Edo era by the local lord Date family. As Aobayama fosters well preserved rich flora and fauna, it has been designated as a Natural Monument by Japanese government since 1972. The botanical gardens are surrounded by beautiful fir forests native to the region's hilly terrain. The Herbarium TUS is in the botanical garden. The herbarium preserves more than 300,000 specimens, and it is known with the rich collection Leguminosae from Asia that is collected by Prof. Hiroyoshi Ohashi, including 293 type specimens (with 96 holotypes).

In the short tour, Koji Yonekura, the curator of the TUS, will guide you to the beautiful garden.

Also, for the conference period, you can enter to the garden for free by showing your name tag (with the conference logo printed on it). So, if you feel exhausted with lots of new ideas obtained at the conference, please have a walk and refresh in the Aobayama Botanical Garden.

(3) Mid Conference Excursion

Coordinator: Tadashi Kajita, Yoshihisa Suyama, Koji Yonekura and Firouzeh Javadi

11:30 - 18:30 on 31st August, 2018

Meeting Points: (1) Entrance lobby of the Conference Venue and (2) Main Entrance of Botanical Garden

Maximum capacity: 110 people for two buses.

Registration fee: **FREE** (including a round trip bus transportation, a guided tour to the Nikka Whiskey Brewery, Entrance fee to Iwamatsu-ryokan (an traditional style Japanese Spa resort), Fee for taking spa (with a rental towel)) ** Lunch IS NOT included (participants will take lunch at restaurants or shops in *Jouge* area.)

Preparation: If you will try Japanese Style Hot Spa, you may want to bring your own clothes and bigger towel. Soap and shampoo will be provided at the spa.

Registration: To adjust the number of passengers in two busses, we will ask your intention to participate to the excursion by the morning of the second day of the conference (30th Aug).

Plan

- 11:30: After the workshop and Botanical Garden tour, participants of the excursion will meet up at entrance lobby of the Conference venue or the entrance of the Botanical Garden. We start by two Buses. (max capacity 110 people)
- 12:30: Jouge area. Historical place (Temple and small town) and surrounding natural forests. Participants will have lunch here by themselves. Please try the famous Fried Tohu. (see the map below to have an idea about what you can have). Stay for two hours.
- 14:30: Start to Sakunami Area by bus. The bus will start following the schedule, so please don't be late for the bus.
- 15:00: Nikka whiskey brewery: A guided tour for about an hour. This area is famous for clear water suitable for whiskey. You may want to taste.
- 16:20: Start to Iwamatsu Ryokoan Hot Spring hotel. Participants enter the hotel and can try to take Japanese style Hot Spring. The organization committee will pay the entrance fee to the hotel (70 JPY/p) and fee for the Hot Spring (1,500 JPY/p, including a rental towel).



(Tourist map from http://johgi-info.jp/temple_town/index.html)

You can also enjoy restaurant, shop and walking around the Hot Spring area.

17:30: A bus return to Sendai. It will arrive at Sendai city area around 18:20 and Sendai Station at 18:30.

(4) Conference Dinner at the Hot Spring Hotel

Coordinator: Tadashi Kajita, Yoshihisa Suyama, Koji Yonekura and Firouzeh Javadi

17:30 - 19:30 on 31st August, 2018

Iwamatsu Ryokan, Japanese Hotspring Hotel

Prior registration and payment are necessary

Onsen (Hot Spring) is not just a bath. It is a place for getting relaxed, meeting people and medication. We are going to try a very Japanese Style Dinner at Hot Spring hotel, Iwamatsu Ryokan which started Onsen spa there in 1796. Even if you don't take Onsen, please try to change to *Yukata* (a simple Japanese *Kimono* for a relaxed occasion) and feel like a Japanese. The foods provided by the hotel would be much tastier if you are in *Yukata*. More detail information about the dinner and onsen will be provided later at the conference.

16:30: Participants who joined the Excursion reach Iwamatsu Ryokan by bus. Please try to take Onsen to relax. For the participants to the dinner, a towel, a bigger towel and *Yukata* (simple style *Kimono* ware) will be provided for their use at the hotel.

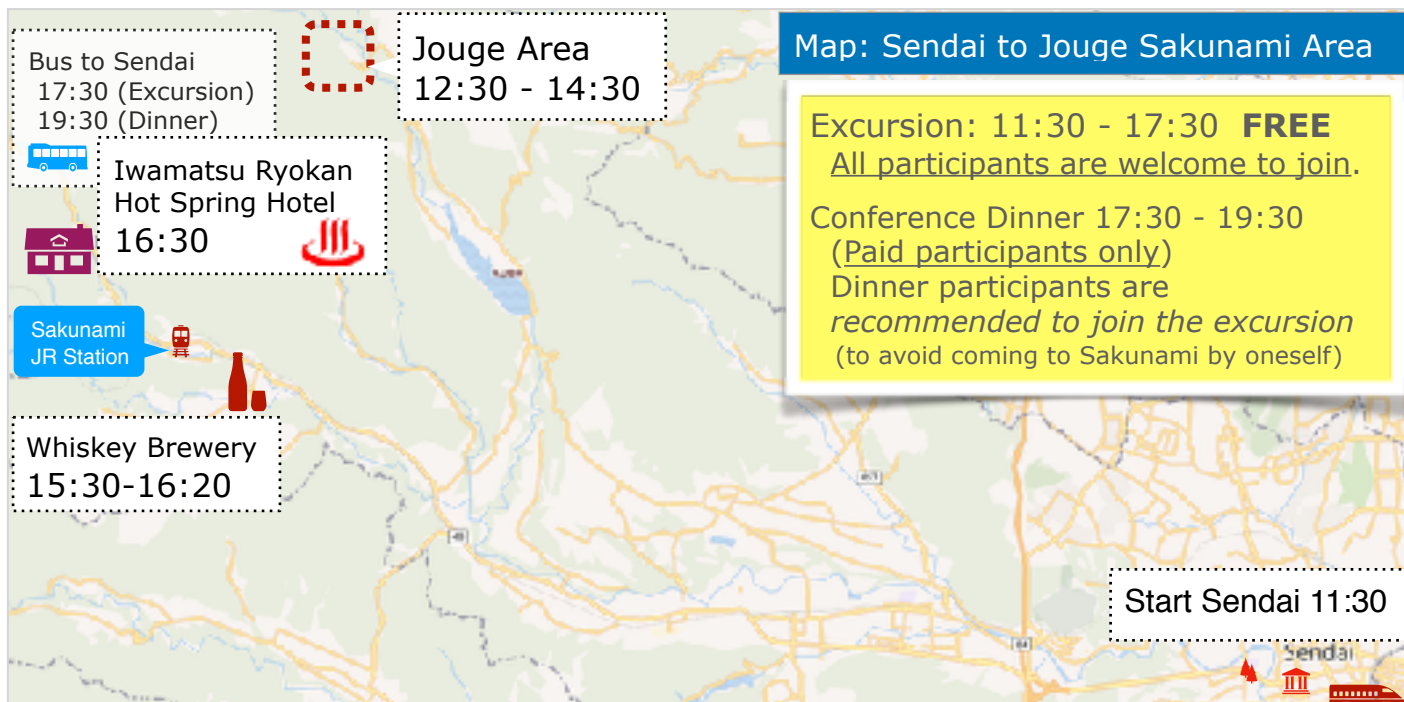
NOTICE:

People who don't join the excursion need to come to the JR Sakunami Station by themselves and take a free shuttle bus service between the Iwamatsu Ryokan and the station. To come to Sakunami Station from Sendai Station by JR Senzan Line, please be careful about the time schedule. Only one train in an hour from Sendai to Sakunami. For example:

Sendai 15:00 --- Sakunami 15:30, Sendai 16:00 --- Sakunami 16:34

17:30: Start Conference dinner at a restaurant in Iwamatsu-Ryokan hotel

19:30: A bus return to Sendai starts. It will arrive at Sendai city area around 20:20.



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List of Symposia

1. Legume Morphology: diversity and evolution

10:50 - 12:20; 13:30 - 15:00 (two sessions), 29th Aug (Wed)

(Organizers: Brigitte Marazzi, Juliana Villela Paulino, Leonardo Borges, Vidal Mansano, Simone de Pádua Teixeira)

2. Evolution and systematics of subfamily Detarioideae

15:30 - 17:00, 29th Aug (Wed)

(Organizers: Manuel de la Estrella, Bente Klitgaard, Anne Bruneau)

3. Diversity of African Legumes

17:30 - 19:00, 29th Aug (Wed)

(Organizer: Ben-Erik Van Wyk)

4. Legume Diversity in Asia

10:50 - 12:20, 30th Aug (Thu)

(Organizers: Tetsukazu Yahara, Tingshuang Yi, Firouzeh Javadi)

5. Phylogenetic niche conservatism, biome switching, and adaptation in legume evolution

13:30 - 15:00; 15:30 - 17:00 (two sessions), 30th Aug (Thu)

(Organizers: Toby Pennington, Colin Hughes)

6. Evolution and diversity of Legume - Soil Bacteria Symbiosis

17:30 - 19:00, 30th Aug (Thu)

(Organizers: Milagros Leon Barrios, Kojiro Takanashi, Tadashi Kajita)

7. Root to Tip Legume Phylogenomics: Building the Phylogenetic Foundations for Next Generation Legume Systematics

10:50 - 12:20; 13:30 - 15:00 (two sessions), 1st Sept (Sat)

(Organizers: Colin Hughes, Toby Pennington, Jeff Doyle)

8. Taxonomy, phylogeny and conservation of tribe Dalbergieae

15:30 - 17:15, 1st Sept (Sat)

(Organizers: Mohammad Vatanparast, Bente Klitgård)

9. Evolutionary Diversification across the legume landscape: from order to genus

17:45 - 19:00, 1st Sept (Sat)

(Organizer: Ashley Eagan)

10. Legume Evolutionary Genomics

10:50 - 12:20, 2nd Sept (Sun)

(Steven Cannon, Sachiko Isobe, Ken Naito)

11. Celebrating 40 years of legume systematics: the productive career of Gwilym P. Lewis

13:30 - 15:00, 2nd Sept (Sun)

(Organizers: Anne Bruneau, Luciano Paganucci de Queiroz)

Acknowledgement

The 7th international Legume Conference is supported by following people, organization, and supporters.

The Tropical Biosphere Research Center, University of the Ryukyus is one of the Joint Usage/Research Centers (JURC) selected by the Ministry of Education, Culture, Sports, Science, and Technology of Japan (MEXT). TBRC provides various supports to 7ILC under its international activities of the JURC programs. People from TBRC played significant roles of organization and funds from TBRC were used to invite participants.

Members of Tohoku University also played essential roles in the Organization committee for the preparation at Sendai. It also provided service to participants to visit the Botanical Garden and Herbarium (TUS).

The Sendai Tourism, Convention and International Association (SenTIA) provided various help for preparation and grant and people to run the 7ILC in Sendai. Volunteers from Sendai City are very helpful for us at the conference venue.

Both the Inoue Foundation for Science and Kajima Foundation provided financial support to promote sciences as well as international research activities. The supports were used for Travel Supports to participants to invite younger researchers to Japan.

Sendai City War Reconstruction Memorial Hall kindly provided extra service to 7ILC to let us continuously use the conference hall.

The 7ILC was planned, organized and run by the organizing committee members, scientific board members, and symposium organizers.

Dr. Qian, Kun at Kyushu University kindly designed the beautiful poster of 7ILC which were also used for the cover of this booklet and welcome board at the conference venue.

And all other people who helped us for 7ILC.

We show our cordial thanks to all those organizations and people above who contributed to realizing 7ILC in Sendai, Japan.

