



# Cucurbitaceae 2008

IX<sup>th</sup> EUCARPIA Meeting on Genetics  
and Breeding of Cucurbitaceae

Avignon - France  
21-24 Mai 2008

<http://www.inra.fr/cucurbitaceae2008>

## INSCRIPTIONS via e-MAIL before April 30<sup>th</sup> for 3 events during the congress

**The field trip will occur on Thursday 22 May.** You are invited to choose one of the 5 tours proposed (participants and accompanying visitors, see below for details). Please indicate your first and second choice. We recommend to people attending the ICuGI meeting (organized after the field trip) to avoid the tour E that could be back late in Avignon.

**Saturday 24 May lunch** is included in the fees for the participants and accompanying persons but needs inscription by e-mail.

**On Sunday 25 May** we propose the visit of a farmer's market followed by 4h hiking between a marvelous village of Provence and a XII century abbey.

Participants with specific dietary requests are invited to inform the organizing committee.

### MEETING INFORMATIONS

More than 220 participants have registered for **Cucurbitaceae 2008**. They come from all continents; twelve European and Mediterranean countries and five Asian countries will be represented. Five speakers will introduce the sessions by keynotes (25 min and 5 min discussion):

Session Genetic resources and diversity: Nebahat Sari (Çukurova University, Turkey)

Session Genetics and breeding: Todd Wehner (North Carolina State University, USA)

Session Pest and disease resistance: Aleš Lebeda (Palacky University, Czech Republic)

Session Genomics: Jordi Garcia Mas (Institut de Recerca i Tecnologia Agroalimentàries, Spain)

Session Genomics and fruit quality: Nurit Katzir (Agricultural Research Organization, Israel)

Twenty-five oral presentations (15 min and 5 min discussion) were selected by the scientific committee and more than 60 posters will be presented during the meeting (width 80 cm, height 120 cm, set on plain supports).

Two working groups will meet during Cucurbitaceae 2008

On Thursday 22 (17h - 19h): International Cucurbit Genomics Initiative

On Saturday 24 (8h30 - 10h30): Cucurbit Genetics Cooperative (concurrent with a poster session)

## SCHEDULE (see the complete schedule on line)

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### Wednesday 21 May

- 8h - 9h30 Welcome, *mounting of posters*  
9h30 - 10h Opening  
10h30 - 12h30 Oral session: **Genetic resources and diversity**  
Keynote: General status of cucurbit genetic resources in Turkey, *Nebahat Sari* (Turkey)
- 12h30-14h *Lunch*
- 14h - 16h Posters and *Coffee break*  
16h - 18h Oral session: **Genetics and Breeding**  
Keynote: Overview of the genes of watermelon, *Todd Wehner* (USA)
- 18h30 *Welcome reception at Avignon Town Hall*

### Thursday 22 May

- 8h30 - 16h Field trip (INRA, GEVES, CTIFL, Gautier Semences, De Ruiters Seeds)
- 16h30-17h *Coffee break*  
17h-19h International Cucurbit Genomics Initiative meeting
- 19h "*Palais des Papes*" by night

### Friday 23 May

- 8h30 - 10h30 Oral session: **Pest and disease resistance**  
Keynote: New concept for determination and denomination of pathotypes and races of cucurbit powdery mildew, *Aleš Lebeda* (Czech Republic)
- 10h - 10h30 *Coffee break*  
11h - 12h10 Oral session: **Pest and disease resistance** (continuation)
- 12h10 - 14h *Lunch*
- 14h - 16h30 Posters and *Coffee break*
- 16h30 - 18h20 Oral session: **Genomics**  
Keynote: Current genomic resources in melon and other cucurbits, *Jordi Garcia-Mas* (Spain)
- 19h30 *Evening "on the Rhône"*

### Saturday 24 May

- 8h30 - 10h Posters / Cucurbit Genetic Cooperative meeting  
10h - 10h30 *Coffee break*  
10h30 - 12h20 Oral session: **Genomics and fruit quality**  
Keynote: Melon fruit quality: A genomic approach, *Nurit Katzir* (Israël)
- 12h20 - 13h Conclusions
- 13h *Lunch*
- End of the meeting

## FIELD TRIP PROGRAM THURSDAY 8H30-16H

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The second day of Cucurbitaceae 2008 will be dedicated to a field trip. Three public institutions and two seeds companies invite the participants and the accompanying persons to visit their facilities and field and greenhouse trials.

Buses, starting near the Palais des Papes, will drive you to two sites. We offer five different tours.

	Tour A	Tour B	Tour C	Tour D	Tour E
a.m.	CTIFL	Gautier Semences	GEVES	INRA	De Ruiter
p.m.	INRA	GEVES	De Ruiter Seeds	Gautier Semences	CTIFL

**INRA:** It is a public research agency for food and nutrition, agriculture and the environment in the perspective of sustainable development. Two INRA research units will welcome the participants to Cucurbitaceae 2008:

### Research Unit for Genetic and Breeding of Fruit and Vegetables

More than 50 scientists, including PhD students, are working on six vegetable crops (eggplant, lettuce, melon, pepper, potato and tomato) and two fruit species of the genus *Prunus* (apricot and peach) and their rootstocks. The Unit is organized into four scientific groups i) Genome understanding, Resources and innovation, ii) Functional characterization of plant/pathogen and pest interactions, iii) Sustainable management of pest and disease resistances, iv) Genetic and molecular basis of fruit quality. *During the visit, a large overview of the INRA melon genetic resources and the different tests to assess resistance to powdery mildew and to aphids will be presented.*

### Research Unit of Plant Pathology

About 20 scientists, including PhD students, are mainly studying the diseases affecting the Mediterranean vegetable crops as well as viral disease of ornamentals. They i) identify plant pathogens and characterize their phenotype and genetic diversity ii) develop simple and accurate diagnostic methods, iii) elucidate the conditions conducive to disease epidemics and iv) assess the impact of biotic and abiotic factors on durability of disease control methods, including genetic resistance. *During the visit, the results of a survey during the last 5 years of viral diseases on Cucurbits will be presented.*

**GEVES:** GEVES is the French agency in charged of variety technical examination for registration, Plant Breeder's Right and control of the quality of seeds lots. The agency is also a coordinator or partner for the preservation of vegetable genetic resources with INRA (Artichoke, *Solanum*, and Chicory). Cavaillon GEVES unit, a station of the INRA Avignon center, is charged of technical examination for vegetables, fruits, ornamental and oil species. For vegetables, the station is mainly involved in the examination of Mediterranean species, *Solanum* and Cucurbits – melon, squash, cucumber, pumpkins and watermelon. *Visitors will be hosted to visit variety demonstration trials on: i) the genetic progress of melon and squash since 1950's in the western part of Europe (old populations, O.P varieties, HF1, with the evolution of the standard requirements for quality and fruits types, diversification and genetic disease resistances); ii) methodology of DUS test for Cucurbit species.*

**Ctifl:** Ctifl is a technical institute for fruit and vegetables. Research and development activities are carried out here to develop new techniques of production and distribution of fruit and vegetables. It offers training and information and contributes to exchanges between growers and traders involved in the fruit and vegetables production network. Seventy-three people work at the Balandran centre on Mediterranean fruit (peach, strawberry, apricot, cherry, ...) and vegetable crops (melon, squash, tomato, pepper, eggplant, lettuce, ...) cultivated in open field and greenhouses under conventional or organic crop management. The centre also has a sensorial analysis laboratory. *During the visit several trials on melon will be presented: grafting and Fusarium wilt, biodegradable plastic film, powdery mildew and sensorial analysis... and as well as other trials, depending on the timing of the visit.*

**Gautier-Semences:** For over 50 years Gautier Semences has been creating and distributing high quality vegetable seeds aimed at professional growers (tomato, lettuce, melon, squash etc...). Its network of technical and sales professionals covers the major growing areas of Europe (France, Spain, Italy, Portugal, and United Kingdom) and the Mediterranean basin. Based in Provence, in the heart of an important vegetable growing area, Gautier Semences has recently re-organized and expanded its head office, research unit and production facilities. *During the visit you will be presented:*

- *The seed processing chain (treatment, packaging and storage)*
- *Field trials: 1) The fruit of the collaboration between the INRA and private seeds companies around the example of melon breeding for resistance to fusarium wilt. 2) The different types of squashes bred in the Mediterranean countries.*

**De Ruiter Seeds:** This private company has its head office in the Netherlands. It works for crop improvement and seed production of eggplant, tomato, pepper, cucumber, melon and rootstock. At the Saint-Andiol unit, in the heart of the Charentais melon growing area, breeding concerns the Charentais melon. Charentais melon breeding is also supported by a breeding station in Almeria (Spain) and the technical assistance of a Research Centre in the Netherlands. The unit also strongly supports the breeding of all other crops of De Ruiter Seeds. *During the visit, a trial illustrating the collaboration with INRA for resistance to aphids (assessment of selective pressure exerted by resistance on aphid populations), and a melon collection will be presented.*

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## HEBERGEMENT AND TRANSPORT

Hotel informations: <http://www.ot-avignon.fr/pages/accueil.htm>

Avignon can be directly reached from Paris- Orly Airport by daily domestic flights (1h15) (<http://www.airfrance.fr>).

Avignon TGV railway station is connected by bus shuttle to the city center where are located the hotels and the Congress center.

From Marseille Marignane Airport, take the shuttle to the railway station Aix-en-Provence TGV, which is daily directly connected to Avignon TGV railway station (<http://www.voyages-sncf.com>, 20 mn).

From Paris Charles de Gaulle Airport: direct TGV train to Avignon; or reach Paris gare de Lyon railway station or Paris- Orly Airport (<http://www.voyages-sncf.com>, <http://www.airfrance.fr>).

From Lyon Saint-Exupéry Airport: direct TGV train to Avignon; or reach Lyon-Part-Dieu railway station (<http://www.voyages-sncf.com>).

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Organizing committee: Claudie ARLIAUD, Nathalie BOISSOT, Jean-Paul BOUCHET, Véronique CHOVELON, Catherine DOGIMONT, Michel PITRAT.

INRA – GAFL

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