

THE 39th ANNUAL SESSION/MEETINGS OF INTERNATIONAL PEPPER COMMUNITY

16th Peppertech Meeting

“Germplasm Exchange Program”

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Why do germplasm exchange?

- Security to future generations genetic resources of black pepper;
- Introduce genetic variability into black pepper breeding program;
- Find solutions for the major problems for cultivation;
- Increase production in the same cultivation area;
- Share new cultivars with countries members from IPC;



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Others techniques associated

- Micropropagation to production in large scale from new cultivar and germplasm exchange;
- Molecular marker to monitor genotype the cultivars;
- Pollination controled methods to realize crosses;
- Clonal cleaning against viral disease;
- Methods of quantitative genetic to evaluate and select new cultivars on the field;
- Efficient methods to selection as in vitro as on the field;
- Adoption of Good Agricultural Practices (GAP) for Production of Black Pepper (*Piper nigrum* L.) of quality



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Who Will participate?

- Every countries member has been interested or wish to have a qualitative advances on black pepper production;

Who Will Lead?

The international Pepper Community



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What benefits will be shared?

- ✓ Black pepper plant breeding program for wide world;
- ✓ Biotechnologies for advance to generation new cultivars;
- ✓ Increasing production on the same cultivation area;
- ✓ Reduction of production costs;
- ✓ Conservation and security of genetic heritage;
- ✓ Repository of black pepper plant genetic variability to face global climate change



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What technologies are Brazil generated?



AGRICULTURAL RESEARCH
INNOVATION - QUALITY OF LIFE

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- ✓ Controlled pollination method to generate hybrids
- ✓ Micropropagation from shoots and caulinar apex;
- ✓ Cleaning clonal from in vitro cultivation of meristem
- ✓ Microsatellites marked for genotyping into plant breeding program
- ✓ Micrografting between cultivars and species of Piper
- ✓ Germplasm bank with cultivars of Piper nigrum and species from Piper.



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Controlled pollination method to generate hybrids



Micropropagation from shoots and caulinar apex;



Cleaning clonal from in vitro cultivation of meristem



Microsatellites marked for genotyping into plant breeding program



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Micrografting between cultivars and species of Piper



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Germplasm bank with cultivars of *Piper nigrum* and species from *Piper*.

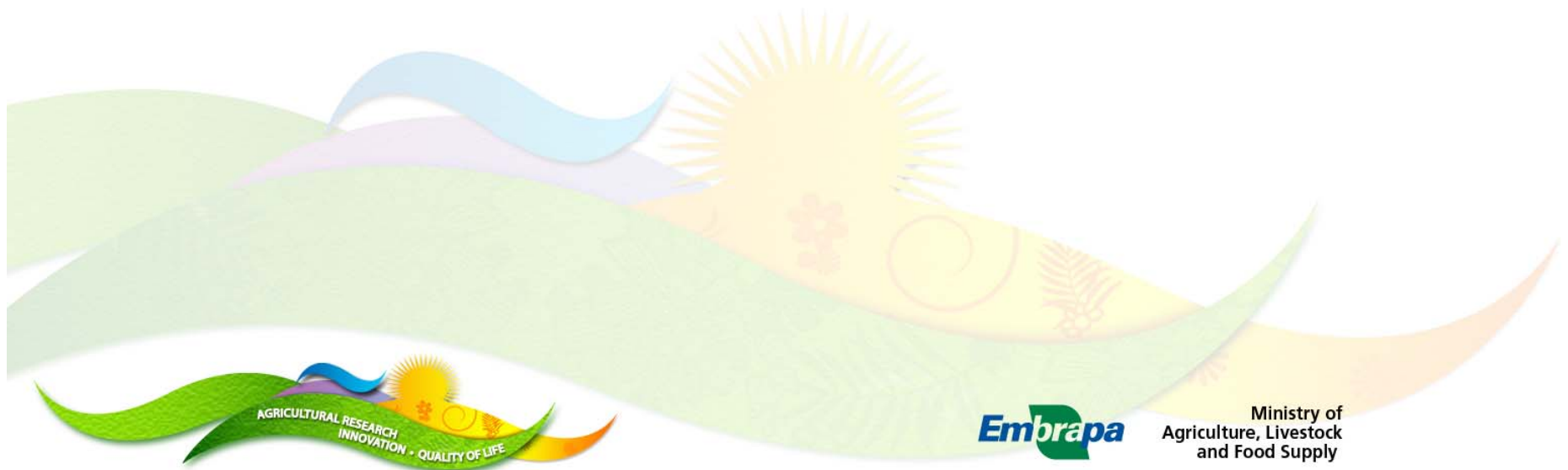


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Researches on going

- Hybrids between cultivars in evaluation;
- Good practices will be transferred to adoption for the farmers by researchers and technicians.



Final considerations

- Suggestion that IPC will be lead of the world program of black pepper plant breeding;
- IPC articulate with member countries, multilateral agreements to germplasm exchange;
- IPC obtain financial resources to member countries introduce good practices on black pepper cultivation to present a best quality products for exportation.



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Thank you!

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