

# ***AÇÕES DA EMBRAPA TRANSFERÊNCIA DE TECNOLOGIA – GESTÃO DE FRUTEIRAS***

***Ciro Scaranari  
Embrapa Transferência de Tecnologia  
Escritório de Campinas***



Transferência de Tecnologia

Ministério da Agricultura,  
Pecuária e Abastecimento



## Nossa Missão:

***Ser a articuladora da transferência de tecnologia e do negócio na Embrapa, viabilizando o processo de inovação para promover a sustentabilidade da agricultura brasileira em benefício da sociedade.***

## Nosso foco:

- ✓ ***produtos oriundos de Programas de Melhoramento da Embrapa, ou***
- ✓ ***produtos para os quais uma forte demanda regional, justifique a produção de mudas e sementes.***
- ✓ ***produtos registrados e ou protegidos e com origem genética comprovada.***

# Escritórios de Negócios



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# Ações em fruticultura junto às Unidades de Pesquisa

## Unidades de Pesquisa

Embrapa Uva e Vinho

Embrapa Clima Temperado

Embrapa Cerrados

Embrapa Mandioca e Fruticultura Tropical

Embrapa Amazônia Oriental

Embrapa Amazônia Ocidental



# NOVA LEI DE SEMENTES E MUDAS

LEI nº10.711, DE 05 DE AGOSTO DE 2003

DECRETO Nº 5.153, DE 23 DE JULHO DE 2004

INSTRUÇÃO NORMATIVA Nº 24, DE 16 DE DEZEMBRO  
DE 2005 - NORMAS PARA PRODUÇÃO E  
COMERCIALIZAÇÃO E UTILIZAÇÃO DE MUDAS.



# PRODUÇÃO DE MUDAS

## CATEGORIAS

**PLANTA BÁSICA**

**PLANTA MATRIZ**

**MUDA CERTIFICADA ou**

**MUDA**



# Como nasce uma nova cultivar na Embrapa?

1. Fases iniciais do Programa de Melhoramento
2. Ensaios Nacionais
3. Material Novo → validação
4. Material Básico
  - Sanidade / Indexação
  - Ambiente Protegido
5. Inscrição do material básico no MAPA
  - Atestado de Origem Genética
  - Atestado fitossanitário
6. Registro e Proteção
  - Registro – produção e comercialização
  - Proteção – propriedade intelectual
7. Nova Cultivar

# REDE DE UNIDADES DE OBSERVAÇÃO (UOs) e UNIDADES DE DEMONSTRAÇÃO (UDs) DE FRUTEIRAS TROPICIAIS E SUBTROPICAIS – TESTES FINAIS E VALIDAÇÃO

## 89 PONTOS NA REDE DE VALIDAÇÃO

CNPMF e CPAA (27)  
CPACT e IAC (7)  
Caroço – CPACT (23)  
Mazado CPAC e CNPMF (5)  
Frutas - CPACT (2)  
Frutos - CPACT (5)  
CPACT (7)  
CNPUV (6)  
Fruto – CNPMF (5)  
CNPUV (2)



# Oferta de propágulos - 2010

Propágulo	Espécie	Modalidade	Quant.	un
Garfos	Caju, Goiaba, Graviola, Manga	Oferta direta	216.400	un
Mudas	Abacaxizeiro, Bananeira Maracujazeiro, Pessegueiro e Videira	Licenciamento	656.000	Un
Estacas	acerola e videira	Oferta direta	893.000	un
Borbulhas	Citros e pessegueiro	Oferta direta	245.000	un
Sementes	Maracujazeiro	Oferta direta	51	kg
Sementes	Coqueiro	Oferta direta	54.000	un



00 Inicial

- Resumo
- Objetivos
- Localização
- Equipe

Linhas de Ação

- Desenvolvimento de Negócios
- Resposta
- Notícias
- Eventos
- Áreas Restrições

Busca:



na área de trabalho



Maqui - Maqui, um novo produto em desenvolvimento



Maqui - Maqui, um novo produto em desenvolvimento



Plantas Medicináveis - Infusão, Chá, Bônus



Maqui - Maqui, um novo produto em desenvolvimento

# "Bioenergia em foco" é novidade na Agrishow 2010

Atualizado em 27 de abril de 2010 às 14:00



No dia 27 de abril, durante a Feira Internacional de Tecnologia Agrícola em Ação - Agrishow/2010, que vai de 26 a 30 de abril, a Empresa Transferência de Tecnologia, unidade da Empresa Brasileira de Pesquisa Agropecuária - Embrapa, vinculada ao Ministério da Agricultura, Pecuária e Abastecimento, em parceria com a Canal Rural, promove o Fórum e Seminário "Bioenergia em foco" para debater sobre o futuro de agroenergia mundial, no auditório principal da Feira.

O Fórum começa às 14h00 e conta com a participação de José Carlos Toledo, presidente da União dos Produtores de Bioenergia (Uboep); Irmão Pedro, presidente da Organização dos Produtores de Cana da Região Centro sul do Brasil (Orglanc); Fábio Mendes, presidente da Federação da Agricultura e Pecuária do Estado de São Paulo (Faspep); e Déca Dezotto, pesquisador da Embrapa Soja (Sorvinda, PR), mas especialmente será prestado aos serviços à Secretaria de Assuntos Estratégicos da Presidência da República.

As 14h15, após o debate, terá início os trabalhos da reunião com a presença do pesquisador Fernando Hironaka, da Unidade Agropecuária com o tema "Oportunidades e desafios para aumento da produtividade na cana-de-açúcar". Na sequência os presidentes da Uboep e da Orglanc, apresentam "As perspectivas da cana 2010/2014 de ponto de vista do produtor e do usina".

Para finalizar a programação, Dezotti Beloniza, pesquisador do Instituto Agronômico (IAC), fala sobre "Plantio direto e rotação na cultura de cana de açúcar".

Este evento vai se encontrar da necessidade de discutir as perspectivas e os problemas que

# Contratos Internacionais para Validação/Licenciamento

## **Videiras**

Andes Nursey Association – Viveros Asociados Chile Ltda, Chile  
Colors Fruit (South África) (Pty) Ltd, África do Sul  
Natures Produce Inc, Barbados  
San Lorenzo Grapes Inc, Peru  
Special New Fruit Licensing Limited, Espanha  
Cornell University, Estados Unidos  
Magrabi Agriculture, Egito

## **Pessequeiros**

Agromillora Catalana AS, Espanha  
Colors Fruit (South Africa) (Pty) Ltd, África do Sul  
Benzit (Marrocos) em negociação

## **Amoreiras**

Meiosis Limited, Inglaterra  
Sun Belle Inc, México





## Description:

- ✓ BRS Carmem, a grape variety for juice, was obtained from a cross between 'BRS Rubea' x 'Muscat Belly A', made at Embrapa Grape and Wine in 1994. Its juice has a good sugar/acidity ratio, with intense violet color.

## Strengths:

- ✓ Productivity: 25-30 ton.ha-1
- ✓ 19° Brix
- ✓ Good diseases resistance

## Opportunities:

- ✓ The excellent flavour makes it a suitable choice for processing alone or as a blend.
- ✓ In Brazil, it is cultivated from 23°S to 30°S.



## Description:

- ✓ Concord Clone 30 is an early season clone, a selection of Concord variety, with similar productivity and fruit quality.

## Strengths:

- ✓ Productivity: 30 ton.ha-1
- ✓ 18-19° Brix
- ✓ Early season

## Opportunities:

- ✓ Concord Clone 30 offers growers the opportunity to start the season with a productive variety that comes on stream two weeks earlier.



## Description:

- ✓ BRS Clara is a seedless table grape produced from a cross between CNPUV 154 147 and `Centennial Seedless`. It was selected in 1998 at Embrapa Grape and Wine Research Station.

## Strengths:

- ✓ Productivity: 30 ton.ha-1
- ✓ 18-20° Brix
- ✓ Berry size: Ø 17.1mm x 22.6mm
- ✓ Cluster weight: ~950g
- ✓ Muscatel taste

## Opportunities:

- ✓ BRS Clara has yellow berries and good fruit quality that is suitable for all types of retail outlets.



## Description:

- ✓ BRS Morena is a seedless table grape initially selected in 2000 from a cross between 'Marroo Seedless' x 'Centennial Seedless' realised at Embrapa Grape and Wine Research Station in 1998.

## Strengths:

- ✓ Productivity: 20-25 ton.ha<sup>-1</sup>
- ✓ 18-20° Brix
- ✓ Berry size: Ø 19.6mm x 24.8mm
- ✓ Cluster weight: ~650g
- ✓ Muscatel taste

## Opportunities:

- ✓ BRS Morena is a black seedless table grape with very crispy and sweet berries, which show flavour and texture that appeal to consumers.



## Description:

✓ Cultivar released in 2007 at Embrapa Temperate Agriculture Research Station, obtained from a cross made in 1995 between Conserva 594 and 'Pepita' and tested as Conserva 1124.

## Strengths:

- ✓ Skin: either completely yellow or with a small area of red
- ✓ Fruit size: medium to large
- ✓ Flesh: non-melting, yellow colour
- ✓ Average fruit weight: >100g
- ✓ Taste: sweet-acid (8-12°Brix)

## Opportunities:

- ✓ It ripens in South of Brazil in end of October.
- ✓ Chilling requirement above 200 hours. Mainly suitable for processing.
- ✓ It is not brown rot resistant (*Monilinia fructicola* (C. Wint.) Honey) but due to early ripening season, the use of pesticides is limited.





## Description:

- ✓ Variety released in 2007 at Embrapa Temperate Agriculture Research Station, obtained from a cross made in 1995 between Conserva 594 and 'Pepita' and tested as Conserva 1125.

## Strengths:

- ✓ Skin: Yellow
- ✓ Fruit size: medium
- ✓ Flesh: non-melting, yellow to orange colour
- ✓ Average fruit weight: ~110g
- ✓ Taste: sweet-acid (9-10°Brix)

## Opportunities:

- ✓ It ripens in early season (South of Brazil) from end September to early October and its chilling requirement is above 150 hours. Mainly suitable for processing.



## Description:

- ✓ Variety launched in 2007, obtained from a cross between 'Chimarrita' and 'Flordaprince', made in 1991 at Embrapa Temperate Agriculture Research Station and trialled at Cascata 952.

## Strengths:

- ✓ Skin: Red (50-80%, bottom yellow)
- ✓ Fruit size: medium to large
- ✓ Flesh: melting, firm and yellow to orange colour
- ✓ Average fruit weight: up to 130g
- ✓ Taste: sweet-low acid (10-16°Brix)

## Opportunities:

- ✓ Ripens in Brazil from mid October (warm regions) to early November (cold regions). Chilling requirement from 200 to 300 hours, less than 'Chimarrita'.

## Description:

- ✓ Variety released in 2007 at Embrapa Temperate Agriculture Research Station, obtained from a cross made in 1991 between 'Chimarrita' e 'Flordaprince' and tested as Cascata 834.

## Strengths:

- ✓ Skin: Cream-greenish, 50% red
- ✓ Fruit size: medium to large
- ✓ Flesh: melting, firm, white-greenish colour
- ✓ Average fruit weight: 110-120g
- ✓ Taste: sweet-low acid (11-12°Brix)

## Opportunities:

- ✓ It ripens from mid October (São Paulo) to early November (Rio Grande do Sul), a few days before BRS Rubimel. Its chilling requirement is above 200 hours. In old plants, depending of environment conditions, cankers similar to *Botryosphaeria* canker (*Botryosphaeria dothidea* (Moug.:Fr.) Ces. & De Not) may occur in the stem, witch real cause is still not known.





## Description:

- ✓ Originated from a cross carried out at Embrapa Cassava & Tropical Fruits in 1989 between `Perolera` and `Smooth Cayenne` and selected for trials in 1992. BRS Imperial was released to Brazilian growers in 2003.

## Strengths:

- ✓ Barrel shaped fruit
- ✓ Fruit size: 18.5 cm
- ✓ Fruit weight: 1,600 – 1,800 g
- ✓ Skin color: Yellow to orange
- ✓ Very good organoleptic characteristics
- ✓ High TSS (15,8Brix) and titrable acidity 0,62%
- ✓ Golden-yellow flesh

## Opportunities:

- ✓ With completely smooth and reddish green leaves. Resistant to Fusarium wilt. Very tolerant to maritime transport, good for fresh market and also for processing.



## Description:

- ✓ Originated from a cross carried out at Embrapa Cassava & Tropical Fruits in 1984 between `Perolera` and `Smooth Cayenne`. BRS Ajubá was released to Brazilian growers in 2009.

## Strengths:

- ✓ Barrel shaped fruit
- ✓ Fruit size: 15.8cm
- ✓ Fruit weight: 1,300–1,400g
- ✓ Skin color: yellow
- ✓ Very good organoleptic characteristics
- ✓ High TSS (14.5Brix) and titrable acidity 0.60%
- ✓ Yellow flesh
- ✓ Good for fresh market and also for processing

## Opportunities:

- ✓ Adapted to Brazilian southern conditions, with heavier fruits than the traditional `Pérola`. With completely smooth and green leaves. Resistant to Fusarium wilt.



### Description:

- ✓ Obtained at Embrapa Temperate Agriculture from a cross between Uruguai, a boysenberry clone introduced from Uruguay, and Comanche, an Arkansas blackberry variety. Tupi is one of the most cultivated blackberry varieties in the world.

### Strengths:

- ✓ Elongated berries
- ✓ Medium size seeds
- ✓ Average weight 7-8g/berry
- ✓ Sweet acid taste, TSS 9-12° Brix

### Opportunities:

- ✓ Ripens from mid November to end of December. Low chilling requirement: less than 300 hours. Shiny large berries, good after harvest quality.

## Description:

- ✓ Obtained from a cross made at the University of Arkansas: [Lawton x (Darrow x Brazos)] (Shaffer tree x Brazos) and selected at Embrapa Temperate Agriculture.



## Strengths:

- ✓ Roundish shaped berries
- ✓ Firm berries with small seeds
- ✓ Fruit size: 4-5 g/berry
- ✓ Sweet acid flavour with predominance of acidity
- ✓ Very dark and uniform colour. The berries are firm and the seeds are small.

## Opportunities

- ✓ Ripens at the same time as Tupy. Plants are erect, thorny type, vigorous, with good capability for suckering. It is a very productive low chilling cultivar (300 hours).



## Description:

- ✓ BRS Sol do Cerrado, a passionfruit hybrid, was obtained at Embrapa Cerrados from a populational breeding and recurrent selection started in 1994 by a crossing between 'Selection GA-2' x 'MA'. BRS Sol do Cerrado has high productivity and good physical and chemical fruit characteristics.

## Strengths:

- ✓ Productivity: 40 ton.ha<sup>-1</sup>.year<sup>-1</sup>
- ✓ 14° Brix
- ✓ Fruit weight: 120 to 350g
- ✓ Pulp content: 38%
- ✓ Easy adaptability

## Opportunities

- ✓ In Brazil, it is cultivated in all States for juice industry and fresh consumption.



# BRS Gigante Amarelo

Passionfruit for juice



## Description:

- ✓ BRS Gigante Amarelo, a passionfruit hybrid was obtained at Embrapa Cerrados from a populational breeding and recurrent selection started in 1994 by a crossing between 'MSC' x 'GA'. BRS Gigante Amarelo has high productivity and good physical and chemical fruit characteristics..

## Strenghts:

- ✓ Productivity: 42 ton.ha-1year-1
- ✓ 14° Brix
- ✓ Fruit weight: 150 to 350 g
- ✓ Pulp content: 40%
- ✓ Easy adaptability

## Opportunities

- ✓ In Brazil, it is cultivated in all States for juice industry and fresh consumption.



## Description:

- ✓ BRS Ouro Vermelho, a passionfruit hybrid, was obtained at Embrapa Cerrados from a populational breeding and recurrent selection started in 1994 by a crossing between 'Cv. Sul Brasil Marília X Passiflora edulis Roxo F1 Selection x Selection GA-2. BRS Ouro Vermelho has high productivity, good physical and chemical fruit characteristics and resistance to diseases. Red fruits (20%) were produced.

## Strengths:

- ✓ Productivity: 40 ton.ha-1year-1
- ✓ 15° Brix
- ✓ Fruit weight: 120 to 350 g
- ✓ Pulp content: 40%
- ✓ Easy adaptability

## Opportunities

- ✓ In Brazil, it is cultivated in all States for juice industry and fresh consumption. Its juice has an intense color and high Vitamin C content.



## Description:

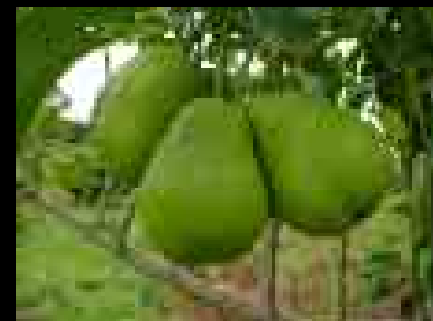
- ✓ BRS Conquista is a new AAB banana variety subgroup Conquista. It was obtained from the natural variation of 'Thap Maeo' variety identified in Embrapa Western Amazonia experimental field. Besides the tolerance to diseases, BRS Conquista has high productivity, reaching up to 48t per hectare per year.

## Strengths:

- ✓ Average bunch weight – 29kg
- ✓ Average number of cluster / bunch – 13
- ✓ Average cluster weight – 2.25kg
- ✓ Average number of fruit / bunch – 326
- ✓ Yield / ha – 48 t
- ✓ Tolerant for Nematodes and “Black / Yellow Sigatoka” and “Panama” diseases

## Opportunities:

- ✓ The mature fruits show light yellow skin coloration, good sugar/acid equilibrium and pleasant aroma, and above all, high yield in the pulp/skin relation.



# Obrigado!!!

[ciro@campinas.snt.embrapa.br](mailto:ciro@campinas.snt.embrapa.br)

