



## **Pergunte ao Euca Expert / Ask the Euca X Pert**

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### **Perguntas / Questions**

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**Pergunta nº: 814/Question nº: 814**

**Título: /Title: [Inquiry about Brazilian \*Eucalyptus\* pulp and paper manufacturing](#)**

Por: / By: [Dannica Kim](#)

**E-mail:** [dannicakim@yahoo.com](mailto:dannicakim@yahoo.com)

**Questão: /Question:**

Good day Mr. Foelkel!

I am Dannica Kim, a university student from the Philippines. I am currently doing a research paper about *Eucalyptus* and would like to know some information about these trees. I found your website and realized that you are one of the best persons to ask about the matter.

Can you please help me by answering some of my questions? I actually have to submit a report about this on Friday (Philippine time).

Anyway, I only have three questions. They are as listed:

1. Is there any need for the *Eucalyptus* industry in Brazil? (eg. better machines, mill needs, etc.)
2. Is there an increased demand for *Eucalyptus* globally?
3. How does Brazil keep with the world market demand for *Eucalyptus*?

That would be all. If you can also tell me other info on *Eucalyptus* around the world, I would appreciate it. I can also call you via Skype should you wish it.

Thank you very much.

Dannica Kim  
Philippines

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### **Resposta por Celso Foelkel: / Answer by Celso Foelkel:**

**Dear Danica,** thanks for your message concerning the Brazilian *Eucalyptus* pulp production.

First of all, I would like to recommend you to have a look to some available docs that may give a good idea of the Brazilian position as market pulp producer and supplier:

About Pulp & Paper sector

<http://www.bracelpa.org.br/eng/estatisticas/pdf/booklet/march2009.pdf>

<http://www.bracelpa.org.br/eng/estatisticas/index.html>

About all Plantation Forest segment

<http://www.abraflor.org.br/estatisticas/ABRAF09-EN.pdf> (9,2 MB)

<http://www.abraflor.org.br/estatisticas/ABRAF IG 2007.zip> (24 MB)

To export good quality pulp and paper products and to fulfill the environmental and social requirements, the Brazilian mills are very modern and state-of-the-art in technologies, with minimum 1 million tons per year of production (to take advantage of the economy scale factor). The requirements come from the need of competitiveness, operational performances and quality specifications. Sustainability issues (forest certification, environmental system management, strict legislation) are also key points.

The global demand of *Eucalyptus* pulps grows at the same rate as Brazilian grows in this pulp manufacture. The reason is simple, the pulp quality is excellent and the competitive advantage of this raw

material enable pulp sellers to have better margins and better prices to users. These are great advantages to promote further consumption growth.

Brazil is leading the *Eucalyptus* world pulp supply and production. We are ahead (in our country) of the projections of global pulp consumption growth rates, since the modern Brazilian fiberlines are coming to displace other pulps or to supply pulp demand growth. This means that we are growing in Brazil faster than the world average growth for pulp production.

The *Eucalyptus* highly productive forests are vital competitive advantage factors, they are drivers for all these successes.

I hope you may be also successful with your paper.

**Regadrs**

**Celso Foelkel**

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**Outros Comentários: / Other Comments:**

**Por: / By:** [Dannica Kim](#)

**E-mail:** [dannicakim@yahoo.com](mailto:dannicakim@yahoo.com)

Thank you for the wonderful information sir! It truly helped my research.

However, I have this one last question about spacing. I have read that wider spacing of trees can lead to less cost. Do you have any idea what it means and how much is saved by this 'wider spacing'?

Thank you again.

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**Outros Comentários: / Other Comments:**

**Por: / By:** **Celso Foelkel**

**Dannica**, the correct number of trees per hectare depends on a number of factors, not only is due to a wish. Some of these factors are: genetic material of the *Eucalyptus* being planted, growth rate, silvicultural operations, soil fertility, etc. There is no reason to open spacing in case the trees are not good enough to grow and to occupy the area being offered to them. When we are using good forest technologies and top quality genetically improved materials, surely the production costs are

decreased by wider spacing (fewer seedlings, easy machanization, more volume per individual trees at harvesting, etc.).

Those foresters who are able to plant in wider spacings are not luck men, but hard workers who are being awarded by their efforts.

**Regards**

**Celso**

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**Outros Comentários: / Other Comments:**

**Por: / By:** [Dannica Kim](#)

**E-mail:** [dannicakim@yahoo.com](mailto:dannicakim@yahoo.com)

So sir, isn't there actual money amount that can be saved if wider spacing is used? Not even an estimate of how much money can be saved? Thank you. You have been really helpful.

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**Outros Comentários: / Other Comments:**

**Por: / By: Celso Foelkel**

**Dannica**, good morning.

When you switch from a 3x2 meters designed plantation to other wider spacing, let's say 3x3 m or 4x3 meters, considering the issues I've already previously mentioned to you, you have:

- 3x2 m = 6 m<sup>2</sup> plant = 1,667 trees/hectare
- 3x3 m = 9 m<sup>2</sup> plant = 1,111 trees/hectare
- 4x3 m = 12 m<sup>2</sup> plant = 833 trees/hectare
- Larger spacings - not recommend to full scale plantation, unless you may have other type agroforestry designs.

You may imagine that you are to have savings on seedlings, soil preparation, irrigation, fertilization, planting operation, transportation and storage, labor, etc.

Total savings for Brazilian conditions (rough estimates) are in the plantation establishment:

- from 3x2 m to 3x3 m ----- 150 to 200 US\$/hectare
- from 3x2 m to 4x3 m ----- 280 to 300 US\$/hectare

I hope you may write a great report.

**Regards**

**Celso Foelkel**