



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

**[www.eucalyptus.com.br](http://www.eucalyptus.com.br)**

**[www.celso-foelkel.com.br](http://www.celso-foelkel.com.br)**

---

**Perguntas / Questions**

---

**Pergunta nº: 1744/Question nº: 1744**

**Título:/Title: *Fiber differences for *Eucalyptus globulus* and *Eucalyptus nitens****

**Por: / By: David Hillman**

**E-mail: [dhillman87@juno.com](mailto:dhillman87@juno.com)**

**Questão: /Question:**

**Dear Celso:** these are the two most popular cold weather resistant varieties of *Eucalyptus*. How do their fibers compare with *E.urograndis*? Are the cold weather fiber walls a bit thicker....are the fibers themselves longer or shorter? What are their refining characteristics? What do papermakers say about them? Any insights you could provide us would be most appreciated!

**Abrazzo, Dave**

---

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

### **Dear and special friend Dave**

Both species of *Eucalyptus*, either *globulus* and *nitens*, are more tolerant to cold weathers, but not fully resistant.

However, this similar behavior in relation to weather does not correspond to similar wood and pulp characteristics.

The *Eucalyptus nitens* is more alike to *Eucalyptus grandis*, with low density woods, and very large fiber populations in number of fibers per gram of pulp. Fibers walls are thin-walled and easily refined. They are indicated to printing and writing papers, mainly due to opacity and paper surface smoothness.

*Eucalyptus globulus* has a very unique wood quality, with thick-walled fibers and denser wood. However, the wood lignin content is low and hemicelluloses are high in the wood. These features lead to high pulping yield and unique characteristics in the pulps, easily bleached, high viscosities, easy-refining and very good results for coarseness, bulk, opacity, softness, strengths and porosity. The *globulus* fibers are recommended to a large variety of paper grades, such: decor, specialty papers, printing, tissue, cigarettes, industrial filters, etc.

For these and other reasons, the *Eucalyptus globulus* is very much appreciated by mill people, both in pulp and paper manufacturing. However, these advantages are in opposition to tree growth and forest productivity. *E. nitens* is more productive and more tolerant in relation to cold weathers.

**Best regards and good luck**  
**Celso Foelkel**

---