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Perguntas / Questions

Pergunta nº: 1124/Question nº: 1124

Título: /Title: [Debarking eucalyptus logs](#)

Por: / By: [Stulen Henry](#)

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Questão: /Question:

Good Day Mr. Celso Foelkel,

I work for John Deere Forestry in the Advanced R&D area. We design and build machines for the mechanical harvesting of wood fiber globally. I am currently working on a project innovating machine forms to improve the productivity of harvesting plantation of *Eucalyptus* in Brazil. It is our objective to fell, delimb and debark a 6-7 year old stem (average .22 cu m) in a single pass with either a single grip or two harvesting process.

We can currently achieve this in the wet season on a freshly cut stem, with a single grip harvesting head. The problem arises in the dry season

(i.e. winter) or with stems that have been cut for 2-3 days (in the summer). I observe that the bark has a much stronger bond to the wood fiber than when the stem is "wet". I would like to understand this phenomena in more detail to allow us to make better decisions regarding the mechanical solution(s) needed to debark eucalyptus in this condition.

Is this an area where you could help us to gain insight and understanding? (It seems unfortunate that the first two chapters of your "on-line book" are not yet translated to English – or maybe I need to learn Portuguese?)

If you are unable to help, could you direct us to someone who might be able to help here?

Thank You in advance for your attention to this matter.

Regards, Henry

Resposta por Celso Foelkel: / Answer by Celso Foelkel:

Mr. Stulen, good morning.

You are absolutely right – this fact is an Achilles' hell to debark *Eucalyptus* trees. As soon the cambium gets dryer (due to climate or because tree harvesting) the bark "glues" to the xylem. I have discussed this phenomenon in the Chapter 01 of the Eucalyptus Online Book. Although it is not available in English, you may translate it using Google Translator – simple and not so difficult to understand.

However, the solution to this gluing-cambium problem is not simple – the logs become debarkable again just after several weeks of natural drying.

Good luck with your reserch team.

Celso

Outros Comentários: / Other Comments:

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E-mail: