## Pith Estimation on Tree Log End Images

Rémi Decelle\* $^{\dagger 1}$ , Phuc Ngo $^{\ddagger 1}$ , Isabelle Debled-Rennesson $^1$ , Frédéric Mothe $^2$ , and Fleur Longuetaud $^2$ 

 $^{1}$ Lorraine University – LORIA – Lorraine University – LORIA – France  $^{2}$ Lorraine University – INRAE – Lorraine University – INRAE – France

## Abstract

In this paper, we present an algorithm for pith estimation from digital images of wood cross-sections. The method is based on a probabilistic approach, namely ant colony optimization (ACO). After introducing the approach, we describe the implementation and the reproduction of the method linking to an online demonstration. This paper also gives the details on the intern parameter choice and shows how to use the C++ source code for testing, as well as provides limit cases of the proposed method and future improvements.

<sup>\*</sup>Speaker

 $<sup>^\</sup>dagger \textsc{Corresponding author:}$ 

<sup>&</sup>lt;sup>‡</sup>Corresponding author: