Accepted Manuscript

Micromechanical modelling of the progressive failure in unidirectional composites reinforced with bamboo fibres

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 PII:
 S0167-6636(15)00277-X

 DOI:
 10.1016/j.mechmat.2015.12.006

 Reference:
 MECMAT 2530

To appear in: Mechanics of Materials

Received date:22 June 2015Revised date:8 December 2015Accepted date:16 December 2015

Please cite this article as: Fang Wang, Xue Li, Junqian Zhang, Lu Li, Leon M. Keer, Micromechanical modelling of the progressive failure in unidirectional composites reinforced with bamboo fibres, *Mechanics of Materials* (2015), doi: 10.1016/j.mechmat.2015.12.006

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Highlights

- A multiscale approach can be used to investigate composite mechanical behaviour.
- Matrix cracking and interfacial splitting are considered in a 2D shear-lag model.
- Weibull parameters are estimated using the Maximum Likelihood Estimate with multiple strength data.
- The method is applicable for strength prediction of natural fibre reinforced composites.

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