ERRATUM: A VARIATIONAL APPROACH TO VIDEO SEGMENTATION FOR BOTANICAL DATA*
AARON LUTTMAN† AND JOHN BARDSLEY‡

Abstract. In this erratum, we correct the previous explanation of the data-collection procedure as outlined in [SIAM J. Sci. Comput., 29 (2007), pp. 1550–1566].

DOI. 10.1137/070700036

In [1], the authors incorrectly described the data-collection procedure for capturing the botanical fluorescence data.

• In the abstract, the sentence
  “In order to visualize a particular leaf’s stomatal aperture, an experimentalist injects the leaf with a dye so that it fluoresces.”

  should be reworded as
  “In order to visualize a particular leaf’s stomatal aperture, fluorescence is induced corresponding to changes in average stomatal aperture size, and the data are collected at regular intervals.”

• On page 2, in the first full paragraph, the sentence
  “A dye is injected into the leaf that fluoresces when the stomata close, and stomatal dynamics are initiated by decreasing the concentration of H₂O on the upper surface of the leaf.”

  should be replaced with
  “Chlorophyll molecules in an intact leaf that are excited by visible light, upon deexcitation, dissipate part of the excitation energy as infrared fluorescence. Stomatal dynamics are then initiated by decreasing the concentration of H₂O on the upper surface of the leaf.”

These changes reflect that the data-collection procedure used for the data in this work was updated, and the data actually shown in this work are derived from the updated procedure.

REFERENCES


*Received by the editors August 13, 2007; accepted for publication September 14, 2007; published electronically February 8, 2008. This work was partially supported by the NSF under grant DMS-0504325 and by Montana NSF EPScO R.
http://www.siam.org/journals/sisc/30-1/70003.html
†Department of Mathematical Sciences, University of Montana, Missoula, MT 59812, and Division of Science and Mathematics, Bethany Lutheran College, Mankato, MN 56001 (luttman@blc.edu).
‡Department of Mathematical Sciences, University of Montana, Missoula, MT 59812 (bardsleyj@mso.umt.edu).