

DAFTAR PUSTAKA

- Afidah, M. (2012). *Identifikasi Pola Miskonsepsi Mahasiswa pada Konsep Mekanisme Evolusi Menggunakan Certainty of Response Index (CRI)*. (Online), (https://www.unilak.ac.id/media/file/77802842250Artikel_MAR_ATUL_AFIDAH.pdf), diakses pada 05 Januari 2018.
- Arikunto, Suharsimi. (2012). *Dasar-dasar Evaluasi Pendidikan*. Jakarta : Bumi Aksara.
- Baum, D. A. dan Smith, S.D. (2013). *Tree thinking An Introduction to Phylogenetic Biology*. United States: Roberts and Company Publishers, Inc.
- Baum, D. A., S. D. Smith, and S. S. Donovan. (2005). The tree-thinking challenge. *Science*. 310 (5750):979-980.
- Bokor, Julie R., Landis, Jacob B., Crippen, Kent J. (2014). High School Students's Learning and Perception of Phylogenetics of Flowering Plants. *CBE-Life Science Education*. Vol 13, pp: 653-665.
- Borgeding, L.A., Klein, V. A., Ghosh, R., Eibel, A. (2015). Student Teachers' Approaches to Teaching Biological Evolution. *Journal of Sciences Teacher Education*, 26, pp: 371-392.
- Brower, Andrew V.Z. (2015). What is a kladogram and what is not?. *Cladistics*. The Willi Hennig Society. pp:1-4.
- Brower, Andrew V.Z. (2016) Rethinking Tree-Thinking: Kladograms, Ancestors & Evidence. *The American Biology Teacher Journal*. Vol. 78:5, pp:380-384.
- Campbell., Reece, J.B., Urry, L.A., Cain, M.L. Wasserman, S.A., Minorsky, P.V & Jackson R.B. (2013). *Biology. Tenth edition*. United States: Pearson Education, Inc.
- Catley, K. M., & Novick, L. R. (2008). Seeing the wood for the trees: An analysis of evolutionary diagrams in biology textbooks. *BioScience*. 58, 976 – 987.
- Catley, K.M., Phillips, Brenda C., Novick, Laura L. (2013). Snakes and Eels and Dogs! Oh, My! Evaluating High School Students' Tree-Thinking Skills: An Entry Point to Understanding Evolution. *Research Science Education*. Vol 43. Pp: 2327–2348.
- Catley, KM. (2006). Darwin's missing link - A novel paradigm for evolution education. *Science Education*. 90, 767–783.
- Cimer, Atilla. (2012). What makes biology learning difficult and effective: Students' views. *Educational Research and Reviews* Vol. 7 (3), pp. 61-71.

- Cooper, R. A. (2002). Scientific knowledge of the past is possible: Confronting myths about evolution and scientific methods. *American Biology Teacher*. 64, 427 – 432.
- Davenport, Kd., Milks, Kristin Jane., dan Tassell, Rebecca Van. (2015). Investigating *Tree thinking* & Ancestry with Kladograms. *The American Biology Teacher Journal*. Vol. 77:3, pp:198-204
- Dees, Jonathan., Momsen, Jennifer L., Niemi, Jarad., Montplaisir, Lisa. (2014). Student Interpretations of Phylogenetic Trees in an Introductory Biology Course. *CBE-Life Science Education*. Vol. 13, pp: 666-676.
- Freeman, S. (2011). *Biological science: Evolution, diversity, & ecology* (Vol. 2). Boston: Benjamin Cummings.
- Gendron, R. (2000). The classification & evolution of caminalcules. *American Biology Teacher*. 62, pp:570 – 576.
- Gibson, J. P dan Hoefnagels, Marielle H. (2015). Correlation Between *tree thinking* and Acceptance of Evolution in Introductory Biology Students. *Evolution Education Outreach*. Vol. 8:15, pp: 1-17.
- Gibson, J.P. & Cooper J. T. (2017). Botanical Phylo-Cards: A Tree-Thinking Game to Teach Plant Evolution. *The American Biology Teacher*, 79 (3), hlm. 241-244.
- Gregory, T. R dan Ellis, CAJ. (2009). Conceptions of Evolution among Science Graduate Students. *Bioscience*. Vol.59, pp:792-799.
- Gregory, T. Ryan. (2008). Understanding Evolutionary Trees. *Evolution Education and Outreach*. Vol 1, pp:121-137.
- Halverson K.L. (2011). Improving Tree-Thinking One Learnable Skill at a time. *Evolution: Education and Outreach*. 4. Pp 95-106.
- Halverson KL, Pires CJ, Abell SK. (2011). Exploring the Complexity of Tree Thinking Expertise in an Undergraduate Systematics Course. *Science Education*. 95. pp: 794-823.
- Hidayat, T. (2017). *Menggairahkan Pembelajaran Taksonomi Di Kelas Menggunakan Metode Fenetik*. [Online]. Tersedia: <https://www.researchgate.net/publication/313525815>
- Hidayat, T., & Pancoro, A. (2006). *Sistematika dan Filogenetika Molekuler*. [Online]. Tersedia: http://file.upi.edu/Direktori/FPMIPA/JUR._PEND._BIOLOGI/197004101997021/TOPIK_HIDAYAT/Makalah_Filogenetik_Molekuler.pdf. Diakses tanggal 10 Maret 2017

- Hidayat, Topik. (2012). *Presentasi Biosistemika*. [Online]. Tersedia: http://file.upi.edu/diektori/FPMIPA/JUR_Pend_Biologi. Diakses tanggal 10 Maret 2017.
- Hobbs, F. Collin., Johnson, Daniel J., Kearns, Katherine D. (2013). A Deliberate Practice Approach to teaching Phylogenetic Analysis. *CBE-Life Science Education*. Vol. 12, pp:676-686.
- Indriati, E. (2003). Waktu dan Evolusi. Artikel dipresentasikan pada Workshop Ilmu dan Agama, Gadjah Mada University Post Graduate Program. Yogyakarta. 25-27 Juni 2003.
- Jirana dan Amin, Mohammad. (2016). Persepsi Dosen Dan Mahasiswa Terhadap Buku Ajar Dan Metode Pembelajaran Yang Digunakan Dalam Membelajarkan Calon Guru Biologi. *Prosiding Seminar Nasional II Tahun 2016*.
Kerjasama Prodi Pendidikan Biologi FKIP dengan Pusat Studi Lingkungan dan Kependudukan (PSLK) Universitas Muhammadiyah Malang.
- Johnson, R. L., dan Peeples, E. E. (1987). The role of scientific understanding in college: student acceptance of evolution. *American Biology Teacher*, 49 (2).
- Kummer, T A. (2017). *Assessing and Improving Student Understanding of Tree-Thinking* (Ph.D. dissertation) USA: Brigham Young University
- Kummer, Tyler., Whipple, C.J., Jensen, Jamie L. (2016). Prevalence and Persistence of Misconceptions in *Tree thinking*. *Journal Of Microbiology & Biology Education*, Vol, 17 (3), pp : 389-398
- Lord, TR, & Marino, S. (1993). How university students view the theory of evolution. *Journal of College Science Teaching*, 22, 353–357.
- Luthfi, M. J & Khusnuryani, A. (2005). Agama dan Evolusi: Konflik atau Kompromi?. *Kaunia*, Vol. 1: 1.
- McLaurin, Donaven C. (2013). Using manipulative Models to Develop Tree-Thinking. *Thesis*. University of Southern Mississippi.
- Meir, Eli., Perry, Judy., Herron, J.C., Kingsolver, Jel. (2007). College Students' Misconceptions About Evolutionary Trees. *The American Biology Teacher Journal* , 69(7):e71-e76.
- Meisel, Richard. (2010). Teaching Tree-Thinking to Undergraduate Biology Students. *Evolution Education Outreach*. DOI 10.1007/s12052-010-0254-9
- Mirabela, Flora Monica. (2011). Pendekatan Pohon dalam Filogenetik. *Makalah IF2091 Struktur Diskrit*. Bandung : ITB

- Murni, D. (2013). Identifikasi Miskonsepsi Mahasiswa Pada Konsep Substansi Genetika Menggunakan Certainty of Response Index (CRI). *Semirata FMIPA UNILA*.
- Newport, F. (2013). Mississippi maintains hold as most religious U.S. state. Gallop Politics. <http://www.gallup.com/poll/160415/mississippi-maintains-holdreligious-state.aspx>
- Novick L.R., Stull A.T., Catley K.M (2014). Reading Phylogenetic Trees: The Effects of Tree Orientation and Text Processing on Comprehension. *Bioscience*. 62. Pp 757-764.
- Novick, L. R., & Catley, K. M. (2013). Reasoning about evolution's grand patterns: College students' understanding of the Tree of Life. *American Educational Research Journal*, 50, pp: 138 – 177.
- Novick, Laura dan Catley, Kefyn, M. (2016). Fostering 21st-Century Evolutionary Reasoning: Teaching *Tree thinking* to Introductory Biology Students. *Life Sciences Education*. Vol. 15, pp:1-12.
- O'hara, Robert J. (1998). Population thinking and *tree thinking* in systematics. *Zoologica Scripta*. Vol. 26:4, pp: 323-329.
- Omland, K.E, Lyn G. C. & Michael D. C. (2008). Tree Thinking for all biology: the problem with reading phylogenies as ladders of progress. *BioEssays*, 30 (9), hlm.854–867.
- Padian, Kevin. (2008). Trickle-down evolution: An Approach To Getting Major Evolutionary Adaptive Changes Into Textbooks And Curricula. *Integrative and Comparative Biology*. Volume 48, number 2, pp. 175–188.
- Perry, Judy., Meir, Eli., Herron, J.C., Maruca, Susan., Stal, Derek. (2008). Evaluating two Approaches to helping College Students Undertand Evolutionary Trees through Diagramming Tasks. *CBE-Life Science Education*. Vol 7, pp:193-201.
- Philips C.B., Novick L.R., Catley K.M., Funk DJ. (2012). Teaching *Tree thinking* to College Students: It's Not as Easy as You Think. *Evolution: Education and Outreach*. 5, pp. 595-602.
- Purwanto. (2013). Prinsip-Prinsip dan Teknik Evaluasi Pengajaran. Bandung: Remaja Rosdakarya.
- Raven, Peter H., Mason, Kenneth A. Mason., Johnson, George B., Losos, Jonathan and Singer,Susan. (2013). *Biology. Tenth edition*. Boston: McGraw-Hill.
- Rice, J. W., Clough, M.P., Olson, J. K., Adams, D. C., & Colbert, J. T. (2015). University Faculty and Their Knowledge and Acceptanc of Biological Evolution. *Evolution: Education and Outreach*, 8(8).

- Sandvik H. (2008). Tree thinking cannot be taken for granted: challenges for teaching phylogenetics. *Theory Biosci*, 127 (1), hlm. 45–51.
- Shankar, G. (1989). *Analysis Of Factors Influencing The Teaching Of Evolution And Creationism In Texas Public High School Biology Classes*. (Disertasi). Texas Tech University, Amerika.
- Smith, J.J., Cheruvellil, Kendra,S., Auvenshine, Stacie. (2013). Assessment of Student Learning Associated with *Tree thinking* in an Undergraduate Introductory Organismal Biology Course. *Life Sciences Education*. Vol. 12, pp: 542–552.
- Smith, J.J., dan Cheruvelli, Kendra S. (2009). Using Inquiry and Tree-Thinking to “March Through the Animal Phyla”: Teaching Introductory Comparative Biology in an Evolutionary Context. *Evolution Education Outreach*. DOI 10.1007/s12052-009-0156-x
- Stearn, S.C. & Hoekstra, R.F. (2003). *Evolution an Introduction*. New York: Oxford University Press.
- Sudargo, Fransisca. (2012). *Evolusi Prokariot, Protista dan Tumbuhan*. Modul Pembelajaran Evolusi dan Sistematika Makhluk Hidup. Bandung: Universitas Pendidikan Indonesia.
- Sudjana, Nana. (2011). *Penilaian Hasil Belajar Mengajar*. Bandung: Remaja Rosdakarya.
- Sugiyono. (2011). *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta
- Sutrisno, Wahyudi (2015). *Teori Evolusi Darwin dalam Perspektif Islam*. Tesis. Solo: Universitas Muhammadiyah Surakarta.
- Thanukos, A. (2009). A name by any other tree. *Evolution: Education & Outreach*, 2, pp: 303 – 309.
- Tidon, R & Lewontin, R.C. (2004). Teaching Evolutionary Biology. *Genetic and Molecular Biology*. 27.(1), pp :124-131
- UCMP (University of California Museum of Paleontology). (2017). Understanding Evolution. [Online]. Tersedia: http://evolution.berkeley.edu/evolibrary/images/evograms/whale_evo.jpg. Diakses tanggal 10 Maret 2017.
- Walter E.M., Halverson K.M., Boyce C.J. (2013). Investigating the Relationship between College Students’ Acceptance of Evolution and *Tree thinking* Understanding. *Evolution: Education and Outreach*. 6. pp 26.

- Yates, T. L., Salazar-Bravo, J., & Dragoo, J. W. (2004). The importance of the tree of life to society. In J. Cracraft & M. J. Donoghue (Eds.), *Assembling the tree of life* (pp. 7 – 17). New York: Oxford University Press.
- Yates, T.B. & Marek, E.A. (2014). Teachers teaching misconceptions: a study of factors contributing to high school biology students' acquisition of biological evolution-related misconceptions. *Evolution: Education and Outreach*. Vol 7:7.
- Young, Aimee., White, Brian T., dan Skurtu, Tara. (2013). Teaching undergraduate students to draw phylogenetic trees: performance measures and partial successes. *Evolution Education and Outreach*. Vol 6:16, pp: 1-15.