1039-05-163 **Rae Fredrich*** (fredr136@morris.umn.edu), Division of Science and Mathematics, University of Minnesota – Morris, Morris, MN 56267, **Tim Hsu** (hsu@math.sjsu.edu), Department of Mathematics, San Jose State University, San Jose, CA 95192-0103, **Mark J. Logan** (loganm@morris.umn.edu), Division of Science and Mathematics, University of Minnesota – Morris, Morris, MN 56267, and **Katherine Nolan** (kshelley10408@msn.com), Department of Mathematics, San Jose State University, San Jose, CA 95192-0103. *Matchwebs.* Preliminary report.

Recall that a bipartite graph with bipartition $X \cup Y$ is said to be a *normalized matching bipartite graph* (NMBG) if for any $Z \subseteq X$, we have $\frac{|\Gamma(Z)|}{|Y|} \geq \frac{|Z|}{|X|}$, where $\Gamma(Z)$ is the set of neighbors of Z. An NMBG W is said to be *minimal* if removing an edge of W results in a graph that is no longer normalized matching, and a *matchweb* is a connected minimal NMBG. (Matchwebs were first studied by West, Harper, and Daykin; the name is due to Shahriari.)

Since matchwebs turn out to be trees, we may define the *core* of a matchweb W to be W with its leaves pruned. As a first step towards understanding matchwebs, we study them in terms of their cores, which turn out to be a much easier class of graphs to understand: namely, bipartitioned trees with leaves attached to vertices on only one side, or *core graphs*. In particular, we obtain a uniqueness result stating that a given graph is the core of at most one matchweb of a given size, and we show algorithmically that any core graph is the core of some matchweb. (Received March 11, 2008)