

THE MINIMUM ALGEBRAIC CONNECTIVITY OF CATERPILLAR UNICYCLIC GRAPHS*

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Abstract. A caterpillar unicyclic graph is a unicyclic graph in which the removal of all pendant vertices makes it a cycle. In this paper, the unique caterpillar unicyclic graph with minimum algebraic connectivity among all caterpillar unicyclic graphs is determined.

Key words. Algebraic connectivity, Caterpillar unicyclic graph, Characteristic polynomial.

AMS subject classifications. 05C50.

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