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Determining the feasibility of  
anesthetization with a MS-222 solution in  
combination with cardiocentesis in male  
gray treefrogs (*Hyla versicolor*)

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Ethyl 3-aminobenzoate (MS-222) is commonly used to anesthetize fish and amphibians, but few studies have investigated its effects on frogs. We experimented with the effects of combining the use of MS-222 with the extraction of blood via heart puncture. We developed a protocol for the use of MS-222 on male gray treefrogs (*Hyla versicolor*). We exposed the frogs to MS-222 for different time intervals, then extracted blood while they were unconscious. Once blood had been taken, the frogs were closely monitored to see how long it took them to regain consciousness, if in fact they did so. Exposures of 7 min and above to MS-222 resulted in high mortality, but exposures of 4 min or less were sufficient for blood extraction with little or no mortality or behavioral indications of pain or stress. This experiment could serve as a template for other anurans closely related to Gray Treefrogs (*H. versicolor*).