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**Antihypertensive and vasodilator effects of methanolic and aqueous extracts of *Tribulus terrestris* in rats.**

[Phillips OA](#), [Mathew KT](#), [Oriowo MA](#).

Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Kuwait University, P.O. Box 24923, 13110 Safat, Kuwait.

The effects of methanolic and aqueous extracts of *Tribulus terrestris* on rat blood pressure (BP) and the perfused mesenteric vascular bed were investigated. The extracts dose-dependently reduced BP in spontaneously hypertensive rats (SHRs) with the aqueous fraction being more potent than the methanolic fraction at all doses tested. In vitro, the methanolic but not aqueous extract produced a dose-dependent increase in perfusion pressure of the mesenteric vascular bed. When perfusion pressure was raised with phenylephrine ( $10^{-5}$ M), the aqueous extract produced a dose-dependent reduction in perfusion pressure at all doses. A low dose of the methanolic extract produced a vasoconstrictor effect while higher doses produced dose-dependent reduction in perfusion pressure. L-NAME ( $10^{-4}$ M) significantly reduced but did not abolish vasodilation induced by the extracts. Vasodilator responses to aqueous and methanolic fractions were significantly reduced in preparations where perfusion pressure was raised with KCl (60mM). A combination of KCl and L-NAME abolished the vasodilator responses induced by the extracts. It was concluded that methanolic and aqueous extracts of *Tribulus terrestris* possess significant antihypertensive activity in spontaneously hypertensive rats. The antihypertensive effects appeared to result from a direct arterial smooth muscle relaxation possibly involving nitric oxide release and membrane hyperpolarization.

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