

Title of Article : Anti-tubercular compounds from *Spondias mombin*.

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Abstract: *Spondias mombin* is a widely cultivated edible plant used in folkloric medicine for the treatment of severe cough and other respiratory disorders. This study evaluated the anti tubercular property of the stem of *S. mombin* against *Mycobacterium tuberculosis* (H37Rv and EJA-2011) using agar proportion assay on Lowenstein-Jensen medium. Four new compounds were isolated from the stem of *Spondias mombin* and they were identified as mombinrin (1), mombincone (2), mombinoate (3) and mombinol (4) respectively. Compound 1 is a coumarin, 2-4 are flavonoids. At 40 µg/mL concentration, the four compounds exhibited significant inhibitions ($p < 0.05$) against *M. tuberculosis*. At a lower dose of 25 µg/mL, compounds 1 and 3 exhibited significant antimycobacterial inhibitions (96.0% and 97.6% respectively; $p < 0.05$) while compounds 2 and 4 showed moderate inhibitions (85.0% and 88.0% respectively). The findings show that *Spondias mombin* accumulates antimycobacterial compounds that may serve as an important potential source for antitubercular agents.

Keywords: *Spondias mombin*, anti-tubercular compounds, antimycobacterial flavonoids, coumarin.

