

SYNTHESIS AND X-RAY CRYSTALLOGRAPHY OF 2,4,6-TRIMETHYL-1,4-DIHYDRO-PYRIDINE-3,5-DICARBOXYLIC ACID DIETHYL ESTERSOHAIL SAEED*^{ab}, SHAABAN K. MOHAMED^c

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ABSTRACT

The biologically active 2,4,6-trimethyl-1,4-dihydro-pyridine-3,5-dicarboxylic acid diethyl ester has been prepared and characterized by X-ray crystallography. The 1,4-dihydro-pyridine ring is in a flattened boat form, with atoms C3, and N1 being the bow and stern of the boat. Atoms C3 and N1 being 0.1346(12)Å and 0.0970(12)Å above the mean plane of the 1,4-dihydro-pyridine ring. One of the ethyl ester groups were found to be disordered in two positions at occupancies of 0.517 (19) and 0.483 (19) respectively. There are four molecules of 2,4,6-trimethyl-1,4-dihydro-pyridine-3,5-dicarboxylic acid diethyl ester, in the unit cell. Inter-molecular N—H...O hydrogen bonding inter-actions were observed in the crystal lattice which connected the molecules into chain running along *b*-axis.

Keywords: Detector, crystal, ester, acid, ray.

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