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PROTON NMR SPECTRUM OF 1, 1–DI (PROP–2–ENYL)-2 (1H)- NAPHTHALENONE

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The title compound was prepared by treating an alkaline solution of 2–naphthol with two moles of allylbromide at room temperature. Separation of the reaction mixture by preparatory thin layer chromatography gave 1,1–di(prop–2–enyl)–2(1H)–naphthalenone as the major compound. The usual Claisen rearrangement product, 1–(prop–2–enyl)–2–naphthol was also isolated as the minor product. The structures of the reaction products were confirmed by their proton NMR, IR and MS data. The allylic protons (4H) of 1,1–di (prop–2–enyl)–2 (1H)–naphthalenone appeared as a multiplet in the region *delta* 2.3–3.1, whereas the benzylic protons (2H) of 1–(prop–2–enyl)–2–naphthol appeared as a multiplet in the region *delta* 3.6–3.9.

Two natural products having a 2,2–diisoprenylated cyclohezen–1–one moiety fused to benzopyrones have been recently characterised. They are zeyloxanthonone, hermonionic acid. Comparison of their proton NMR, data with those for 1,1–di(prop–2–enyl)–2 (1H)–naphthalenone, 1–(prop–2–enyl)–2–naphthol and another synthetic compound 4–hydroxy–1,1,3–tri–(3–methylbut–2–enyl)–2–oxo–1,2–dihyroxanthen–5–one raises doubts regards the structure proposed for hermionic acid.