tion bis 14 Tage nach der Bestrahlung gemessen (Kurven A, B, C, D). Im alkalischen Gebiet war dies nach 8 Tagen wegen der Bildung von Redukton (2,3-Dioxyacrolein) nicht mehr möglich, da dieses mit dem 2-Methylindolreagenz einen tiefblauen Farbstoff bildet und somit die Bestimmung stört.

Die Abhängigkeit der Malondialdehydkonzentration von der Strahlendosis bei konstantem pH-Wert in einem Dosisbereich von 0–2000 krad zeigt Figur 2. Aus diesen Ergebnissen konnten die folgenden Anfangs-G-Werte berechnet werden: Für den pH-Wert von 2,35 0,202 Moleküle/100 eV, für den pH-Wert von 8,55 0,168 Moleküle/100 eV und für den pH-Wert von 5,50 nur 0,017 Moleküle/100 eV.

Die Ursache für die starke pH-Abhängigkeit der strahleninduzierten Bildung von Malondialdehyd konnte noch nicht geklärt werden. Sie dürfte aber mit der pH-Abhängigkeit der Bildung von H-Atomen und solvatisierten Elektronen zusammenhängen, die bei der primär erfolgenden Wasserradiolyse entstehen.

Summary. A strong pH dependence of the radiation induced formation of malondialdehyde in 1% glycerol solution was observed. The following G-values were found: 0,202 at pH 2,35, 0,017 at pH 5,50 and 0,168 at pH 8,55.

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Chemical Studies of *Jasminum auriculatum* (Vahl) Leaves - II

The present communication deals with chemical investigation of certain fractions isolated from the leaves of *Jasminum auriculatum*, which are known to possess wound healing properties[1].

The non-saponifiable portion obtained from dried leaves[1] was run over neutral alumina column (benzene: ethyl acetate, 50:50) and 2 fractions of hydrocarbons, one with a sharp m.p. 65° (I) and the other with a m.p. 60–65°, were obtained. This latter fraction was resolved further over neutral alumina column using the same solvent system into 2 more fractions (II) m.p. 62–63° and (III) m.p. 71°. Both (II) and (III) were crystallised from ethanol hexane mixture. The IR-spectra of (I) and (III) exhibited the following peaks: (I) (3400, 2850, 1625, 1450, 1375, 730, 720 cm^{-1}) (III) (3400, 2850, 2030, 1450, 730, 710 cm^{-1}) and the presence of a hydroxyl group, and their long chain hydrocarbon nature were thus indicated.

Fraction (III) was analysed for $C_{30}H_{62}O$, C: 81.9, H: 13.8% Found: C: 82.2, H: 14.0% and its acetate, m.p. 68° also on analysis gave the data C: 80.0, H: 13.5%, $C_{32}H_{64}O_2$ requires C: 80.0, H: 13.5% indicating it to be *n*-triacontanol[2]. Further confirmation of this was obtained by mixed melting point determination with an authentic sample of the same.

The fraction (II) m.p. 62–63° revealed itself to be a long chain hydrocarbon hentriacontane ($C_{31}H_{64}$) from its IR-spectrum (2900, 2315, 2010, 1950, 1750, 1475, 1225, 735, 720 cm^{-1}), unaltered melting point with an authentic sample and analytical data; (analysed for $C_{31}H_{64}$, C: 85.32, H: 14.68% Found: C: 85.29, H: 14.60%). A study of fraction (I) m.p. 65° was however abandoned due to scarcity of material.

The previously reported[1] unidentified triterpene m.p. 208°, appears now to be an epimer of lupeol as it possesses identical IR-spectrum (3350, 2950, 1650, 1450, 1380, 1300, 1270, 1140, 1190, 1145, 1110, 1090, 1060, 1050, 1010, 999, 950, 920, 885, 860, 765, 750, 710 cm^{-1}) and causes considerable lowering in mixed melting point with an authentic sample of lupeol.

The total alcoholic extract of dried leaves (1 kg) after concentration under reduced pressure was filtered to remove brown sticky mass and was further concentrated to a relatively small volume. On standing at room temperature for 7 days, a brownish crystalline material was obtained which on crystallization (7 times) with rectified spirit deposited white needle-shaped solid (1.4%) m.p. 169–170°. This showed the following peaks in IR-spectrum (3350, 2900, 1350, 1300, 1250, 1200, 1100, 1025, 960, 920, 730 cm^{-1}) and no unsaturation in UV-spectrum. Its NMR-spectrum established its nature as aliphatic open-chain alcohol, with exchangable hydroxyl protons ($\tau \cdot 5.6$). It was analysed for $C_6H_{14}O_6$ (M.W. 120)[3] C: 39.56, H: 7.69% Found: C: 39.54, H: 7.63% and was confirmed as D-mannitol from its sweet taste, solubility, specific rotation $[\alpha]. = -0.48$ (EtOH), and unchanged mixed melting point with an authentic sample of the same (m.m.p. 167°)[3]. It gave a hexa-acetate, m.p. 120° analyzed for $C_{18}H_{26}O_{12}$ C: 49.8, H: 6.8% Found: C: 50.1, H: 6.2% and hexabenzoate 149°, which are in accordence with that of D-mannitol.

By paper chromatographic study (ascending, Whatman No. 1) of aqueous extract of the dried leaves, the presence of glucose (Rf = 0.22) and fructose (Rf = 0.28) was established using *n*-butanol, acetic acid and water (40:10:50) as irrigating solvent system and aniline hydrogen phthalate as developer[4]. The Rf value for D-mannitol observed for the present sample was the same as the one already reported[1,5].

Zusammenfassung. D-Mannitol, Hentriacontane, *n*-Triacontanol, und ein Epimeres von Lupeol sind aus Blättern von *J. auriculatum* isoliert worden. Glukose und Fruktose sind papierchromatographisch festgestellt worden.

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