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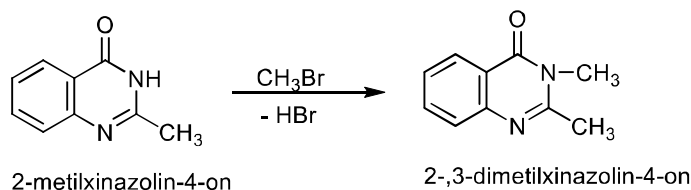
Zulpanov F. A., Nasrullayev A. O., G'aniyev A. A., Tuychiyev A. A.
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(Tashkent, Uzbekistan)

2-METILXINAZOLIN-4-ON METILBROMID BILAN TA'SIRLASHISH REAKSIYASINI O'RGANISH

Adabiyotlardan bizga ma'lumki tabiiy va sintetik geterotsiklik birikmalar xalq xo'jaligining turli sohalarida qo'llanilib kelinayotgan ko'pgina preparatlardan biridir. Mana shunday birikmalar qatoriga xinazolin qatori alkaloidlari va hosilalarini kiritishimiz mumkin. So'nggi yillardagi tadqiqotlar xinazolin halqasini saqlagan geterotsiklik birikmalar orasida turli farmakologik faol preparatlar ko'payib borayotganini ko'rsatadi. Shuning uchun xinazolin alkaloidlari, ularning analoglari va hosilalarining elektrofil va nukleofil reagentlar bilan hosil qilgan mahsulotlarining tuzilishini aniqlash va istiqbolli moddalarni maqsadli sintez qilish hamda ular asosida samarali biologik faol preparatlar yaratish dolzarb muammolardan biridir.

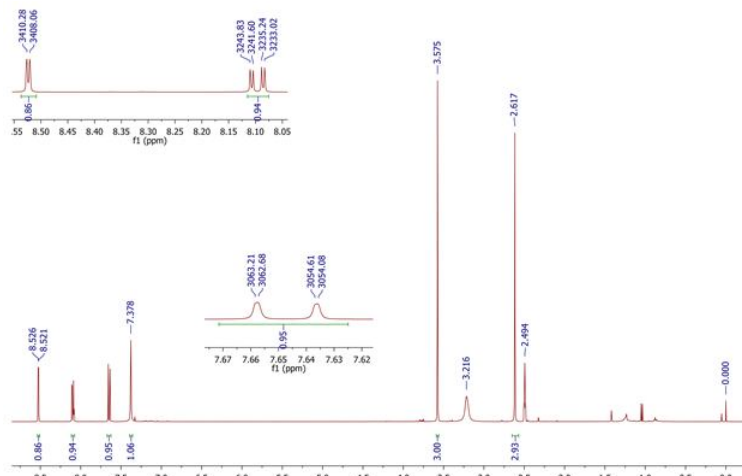
Biz oldingiz ishlarimizni davomi sifatida 2-metilxinazolin-4-onni elektrofil zarrachalar ishtirokida alkillash reaksiyalarini olib bordik. Bunda 2-metilxinazolin-4-onni metil bromid ishtirokida ta'sirlashish natijasida 64 % unum bilan 2-,3-dimetilxinazolin-4-on sintez qilindi.

Reaksiya quyidagi sxema asosida amalga oshadi:



Ishni bajarish tartibi: 2-metilxinazolin-4-on 0,01mol ni KOH 0,01mol va etil spirt (20ml) ni tubi yumaloq kolbaga solib 10 daqiqa qaynatamiz. So'ngra hosil bo'lgan mahsulot biroz sovutilib ustiga CH₃Br 0,01mol ni solamiz va 12 soat davomida moy hammomida 90 °C da qaynatamiz. Yupqa qavat xromotografiyasida tekshirib boramiz orada. Keyin moddamizni sovutib KOH ni 5% li 20 ml eritmasida 5 daqiqa chayqatamiz va teng halimda xloroform 20ml qo'shib yana 10 daqiqa chayqatamiz. Ajratish voronkasiga solib xloroformga o'tgan qisimni ajratib olamiz, suvni yo'qotish maqsadida K₂SO₄ (2 g) qo'shib 3-4 soatga qo'yib qo'yamiz. So'ngra filtirdan o'tqazib moddamizdan xloroformni haydab biroz qismi qolganda olib petriy chashkaga quyib xloroform uchuncha ochiq qoldiramiz. Oq paxtaga o'xshash modda qoladi. Uni yupqa qavat xromotografiyada tekshirib olamiz. Sistema: benzol:ateton 1:1 nisbatda

Quyida sintez qilingan moddaning ¹H-YaMR spekti ko'rsatilgan:



1-rasm: 2,3-dimetil xiazolin-4-on ¹H-YaMR spektri (O'MKI, Oxford/Varian firmasining 400 MHz li YaMR spektrometri (Buyuk Britaniya), erituvchi DMSO+CCl₄)

1-rasmdan moddaning ¹H-YaMR spektri haqida quyidagi xulosalarni olish mumkin: ikkita -CH₃ guruhiga tegishli signallar $\delta_H=2.61$ va $\delta_H=3.57$ da singlet tarzda ko'ringan; aromatik halqadagi (HC_(aromatik)) to'rtta protonga tegishli $\delta_H=7.38$ (m), $\delta_H=7.64$ (dd, 8.6, 0.53), $\delta_H=8.09$ (dd, 8.59, 2.23) va $\delta_H=8.52$ (d, 2.22) spektr chiziqlarni ko'rish mumkin.



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