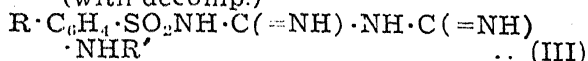


decomp.); R=NO₂, m.p. 267°; R=CH₃, m.p. 189-190° (with decomp.); R=CH₃O, m.p. 176° (with decomp.).

(c) X=2-pyrimidyl and R=H, m.p. 238°; R=Cl, m.p. 189°; R=Br, m.p. 202°; R=NO₂, m.p. 246°; R=CH₃, m.p. 232° (with decomp.); R=CH₃O, m.p. 210-212° (with decomp.)



R=NO₂, AcNH, NH₂, etc. R'=H, alkyl or aryl.

The eighteen new compounds indicated above have been synthesised by the interaction of the hydrochloride of the required sulpha-derivative and the corresponding para-substituted-phenylcyanoguanidine in boiling aqueous dioxan medium. The compounds were obtained as their hydrochloride salts and crystallised from dilute alcohol or water. The substituted phenylcyanoguanidines were obtained after denitrogenating the corresponding substituted phenylazocyanoguanidines and the report of a systematic study of the denitrogenation of similar triazines will be communicated later. These compounds which are fairly soluble in water and bitter in taste are being tested against bird malaria (*P. gallanaceum*) for their activity as antimalarials.

Further work on substituted biguanides as possible antimalarials is in progress. Full paper will be published elsewhere.

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RENNET COAGULATION OF VEGETABLE MILKS

The *in vivo* digestibility coefficients of soya and groundnut protein as present in their milks have been shown to be 92 and 95 respectively as compared with 93 of cow milk protein.¹ In contrast with this, even high doses of animal rennet failed to coagulate the vegetable milks. This occurred in spite of raising the low (30 mg./100 c.c. of milk) calcium content of vegetable milks to the level of that of cow milk (120 mg./100 c.c. milk). Addition of soya milk to cow

milk progressively retarded coagulation by animal rennet, curdling of cow milk being altogether inhibited above 100 per cent. addition. The corresponding dilution of cow milk with water retarded the rate of coagulation but did not altogether inhibit it. The peculiar property of the vegetable milks is not due to the thermolabile inhibiting factor reported by Tauber,² as the preparations used in our experiments were processed products obtained after prolonged boiling.³

In contradistinction to the activity of the animal rennet, we find that vegetable rennets from different sources and, particularly the one from the latex of *Ficus carica*,⁴ coagulate both animal and vegetable milks with equal facility. This difference in the activities of the two groups of rennetic enzymes is under study.

The mechanism of digestion of vegetable milks in the animal body is still comparatively obscure. Attention⁵ has already been drawn to the wide disparity between the *in vitro* and the *in vivo* digestibilities of soya milk. There is increasing volume of literature⁶⁻¹¹ on the nature and properties of the trypsin-inhibitor of soya-beans. We have found that the trypsin inhibitor has no inhibiting action on rennetic activity.

The foregoing observations would show that the digestion of vegetable milks in the animal body follows a different course from that of the animal milk. The ultimate results, as represented by utilisation in the animal body, seem, however, to be the same. Further studies designed to throw fresh light on the mechanism of digestion are in progress.

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AMMONOLYSIS OF ALIPHATIC KETONES WITH HYDROGENATION

DURING the course of our studies in the synthesis of compounds allied to paludrine^{1,2,3} considerable difficulty was met with in preparing isopropylamine, one of the necessary intermediates. In our early experiments this was prepared by both Gabriel's⁴ and Hoffman's⁵ methods which were tedious and lengthy. Direct ammonolysis of acetone with hydrogenation was a feasible approach which was