

(31 g.) was crystallised from aqueous dimethylformamide; m.p. 258–60° (d). Found: N, 10.10; Calc. for $C_{21}H_{17}N_3O_5S$: N, 9.93%.

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A NOTE ON THE DISTRIBUTION OF VARIOUS TYPES OF FOOT-AND- MOUTH DISEASE VIRUS IN UTTAR PRADESH

FOOT-AND-MOUTH disease (FMD) of cattle and other cloven footed animals occurs in an endemic form in India. Every year, this country suffers an economic loss of about 400 million rupees due to this disease (Dhanda and Gopal Krishan, 1958). To evolve a suitable FMD vaccine the knowledge of the distribution of various types of FMD virus is essential.

The limited information available so far indicates that FMDV types O, A, C, and Asia₁ occur in this country. Dutta (1951) reported the occurrence of 37 strains of type O or O variants, 17 strains of type A or A variants, 7 strains of type C or C variants and one strain of atypical nature from a total of 62 strains typed at Indian Veterinary Research Institute. During the next few years, the number of such strains increased to 74 which comprised of 43 strains of type O or O variants, 27 strains of A or A variants, 7 strains of C or C variants and 3 strains of Asia₁ (Dhanda and Gopal Krishan, 1958). Khera and Dhillon (1963) typed four strains from Punjab, three of which were serologically related to type O and the fourth one to Asia₁.

Since then there seems to be no other published report on FMDV types from this country except the scattered information available from I.V.R.I. annual reports which revealed the typing of 36 strains of O or O variants, 10 strains of A or A variants, 3 strains of C or C variants and 14 strains of Asia₁ during the years 1958-59 to 1965-66. The purpose of the present note is to report the results of the typing of FMD virus from the specimens received in this Department during the years 1965-66 and 1966-67 from different parts of U.P.

A total of 84 specimens usually from mouth lesions were either received from field by post in glycerine saline or were collected fresh and typed immediately by complement fixation test following the technique of Brooksby (1952). In few cases, the material was first passaged in 5 to 7 days old suckling mice before typing by complement fixation test. Among the specimens found suitable for typing, viral antigen was revealed in only 24 specimens. Thirteen of these were serologically related to FMDV type O, 8 to type A and 3 to Asia₁. The source of all the O and A types was bovines and those of Asia₁ an outbreak in pigs.

The results presented in the note indicate the predominance of FMDV type O followed by type A and Asia₁ respectively. None of the specimens tested in the present investigation revealed the presence of FMDV type C. In general these results are comparable to those reported earlier from I.V.R.I.

The authors are grateful to Major C. V. G. Choudary, Principal, for providing the facilities to carry out the work.

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