DIAGNOSES OF NEW MAMMALS FROM THE SOUTH-WEST PACIFIC.

By Ellis Troughton.

During the past year various "animal reservoir" collections of rats and marsupials have been submitted for determination at the Australian Museum by several United States research units, especially the U.S.A. Typhus Commission, as represented in the South-West operational areas by Lieutenant-Colonel Cornelius B. Philip and Major Glen M. Kohls.

The complexity of the mammalian fauna of New Guinea and the adjacent islands has been strikingly emphasized by examination of these important collections, and more or less tentative identifications have had to be supplied for the better known groups.

It has also become essential to provide new names for some outstanding forms in accordance with their physical and zoo-geographical relationships. It is hoped to provide a representative set of the "animal reservoir" collection for the U.S. National Museum at Washington. With this object in view, an effort will be made to amplify existing material during the period of service of the author with the Tropical Scientific Section of the A.I.F., under the direction of the Commonwealth Scientific Liaison Bureau.

The following preliminary diagnoses will be amplified in the course of a general revision of the animal reservoir collections associated generally with the scrub typhus collections.

Echymipera philipi sp. nov.

Diagnosis.—A diminutive species of the genus, distinguished from its nearest ally, cockerelli of the New Guinea mainland, by its smaller proportions and darker coloured and more spinous pelage.

Ear small and broadly triangular, a small indentation behind the tip; tragus triangular, simple, unfoliated. Tail definitely shorter than the head and faintly or smoothly ringed, with 19-20 scale-rings to the centimetre. Mammae 6.

Dimensions of young holotype male: External, female allotype in parentheses—head and body 170 (203); tail 52 (72); pes 35.5 (40); ear 23.5×16.5 (21.5×15.5) mm.

Skull: Greatest length 46.6; zygomatic width 21.2; palatal length 27.2; post-palatal foramina (one) 6×3.1 ; interorbital width 12.2; nasals 16.5×4.6 ; molars 1-3, 10.1 mm.

Holotype male M.6999, allotype female M.7028, and paratypes, male and female, in the Australian Museum, collected by Lt.-Col. C. B. Philip and Major G. M. Kohls on Owi Island, in the Schouten Group, New Guinea.

Petaurus kohlsi sp. nov.

Diagnosis.—A small but long-tailed insular species, warranting specific distinction because of the dark fuscous brown body-coloration, which almost eliminates the characteristic dorsal stripe; the somewhat paler ventrum is relieved only by a strongly defined creamy-white irregular patch in the middle of the somewhat paler centre of the belly. There is no trace of the yellowish edging to the side membranes, or the pale grey or yellowish tipping characteristic of races of papuanus, while the tail is proportionately much longer.

Coloration of back, head, and forelimbs about dark mummy-brown (Ridgway); hind part of legs and basal three-fourths of tail decidedly paler, about deep olive-buff flecked with buffy-brown, contrasting with the dark brown of the body and outer fourth