

No. V.—*Pinus Merkusii*. \*

In his introduction to "On plants from South Annam" Vol. IV. No. 3 page 114 of this Journal, Kloss denies the occurrence of *Pinus* in the Malay Peninsula "even if we consider this peninsula to commence, as we must if we want to be accurate, at the head of the Gulf of Siam *i. e.* in Lat. N.  $13^{\circ} 30'$ ."

In Vol. I of this Journal page 35, I recorded that "at Khao Pa Lai, south-west of Petchaburi, I found *Pinus Merkusii* at an elevation of 400 metres growing on bare exposed ridges etc..... but the trees were stunted and small, having a diameter of only one-third that given by Brandis." This was in Lat. N.  $12^{\circ} 50'$ , but surveyors of my party reported that this pine grew in the area to the South, approximately Lat. N.  $12^{\circ} 30'$ .

Khao Pa Lai is outlined on the map facing page 130, Vol. I. of this Journal and is an isolated range situate in the most southerly bend of the Petchaburi river near the Karen village of Song Pi Nong. At the time I noted in Brandis that "the biggest tree seen measured 58 inches circumference and others of three feet were seen growing on bare slopes from 600 up to 1300 feet elevation."

Since recording the above I have seen *P. Merkusii* on Doi Sutep, Chiangmai, at 3800 to 4500 feet elevation on granite. It is also distributed in the forest in which I am stationed here in Raheng (Lat. N.  $17^{\circ}$  Long E.  $99^{\circ}$ ) growing on shale and granite at 1300 to 2500 feet, and on granite to 3600 feet where the drainage is good.

Lack of humus, drainage, and probably also absence of jungle fires have, I think, more to do with the distribution of this pine than has elevation, as in the three areas mentioned it grows on knife-edge ridges or steep hillsides affording little lodgment for dead leaves, grasses, or other inflammable material. On the Tenasserim side from Moulmein or Myawaddy (Brandis' southerly record) southwards, the rainfall is probably too heavy for pines, whereas for Raheng district it is only 41 inches.

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\* Siamese = *Ton son*. Laos = *Ton kiah*.