them with larvae which immediately started weaving. This fast and coordinated weaving activity was necessary because the leaves could snapp back rapidly when the sun disappeared again. In addition preformed leaf rolls were used as pavilions, e.g., those produced by climbing plants, spiders, orthopterans, or caterpillars. Weaving behaviour itself was similar to that of *P. arachne* but because of the rolled pavilions the silkwebs were of much smaller size and were woven fine and dense (*fig. 4*).

Trophobiosis

Homopterans were cultivated in the same manner as in *P. arachne*. *P. hodgsoni* also carried the trophobionts into its pavilions. In the colony which was censused completely aphids were lacking totally but all pavilions contained Pseudococcidae (1-84, median = 41, ∅ = 40.8, SD = 27.3, n = 12). In one experiment on Homoptera-acquisition we offered Hormaphididae which had been tended by *Crematogaster* and *Myrmicaria* species on bamboo, and Pseudococcidae from *P. arachne* to a *P. hodgsoni* colony. Within 3 hours most of the hundreds of homopterans were transported into the pavilions (*fig. 5*).

No statistically significant (Mann-Whitney-U-Test, double sided) differences were found between *P. arachne* and *P. hodgsoni* pavilions concerning numbers of workers, alate females, males, pupae, larvae, Hormaphididae, Pseudococcidae, the sum of homopterans per pavilion, or the sum of homopterans per worker per pavilion. Nevertheless the samples from single colonies showed significant differences between *P. arachne* and *P. hodgsoni*, *P. arachne* always had significantly larger amounts of pupae ($p \leqslant 0.002$),

Fig. 4. — Pavilion of *Polyrhachis hodgsoni* in construction. Left: pure silk web, right: silk web already with detritus.

Abb. 4. — *Polyrhachis hodgsoni* Pavillon im Bau. Links: reine Seidenfläche, rechts: Seide bereits mit Detritus maskiert.