

### Short Communication

Pak. j. sci. ind. res., vol. 34, no. 4, April 1991

## Two Kinds of Stick-Lac from South India Studied in Cross Sections. Part-II

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(Received December 30, 1990)

In Part I, two species of lac insects have been discussed. One is a wild species, *Kerria communis*, and it propagates itself by larvae of male insects becoming bisexual and from such a single insects a generation arises which forms a small chunk of lac encrustation. The tendency to produce males prevents the species being cultivated. The other species in South India is *Kerria mysorensis* which grows only on *Shorea talura* but here it produces both males and females and the species is regularly cultivated. A branch of *Shorea talura* covered by the encrustation of *kerria mysorensis* has been illustrated in Part I. When a twig is growing vertically, lac insects surround it all round so that their encrustation formed by them envelops the twig which has within like the wick of a candle (Fig. 1). Here is such an encrustation of *K. mysorensis* on *Shorea talura* twig. It is shown natural size. A scale is provided which shows

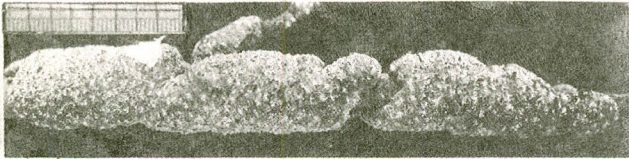


Fig. 1. *Kerria mysorensis* on a twig of *Shorea talura*. Scale gives millimeters and half centimeters.

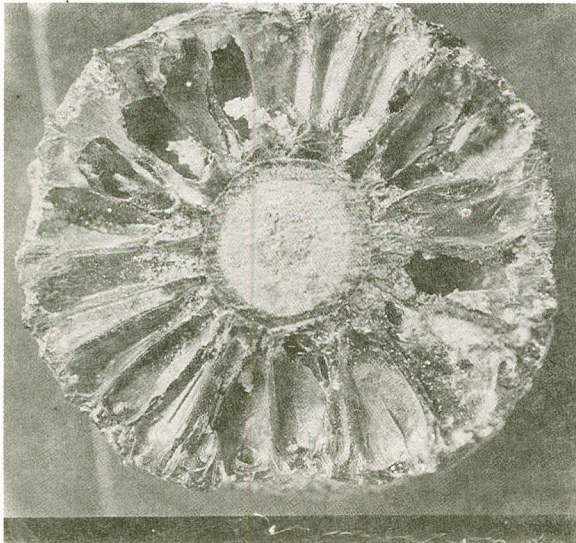


Fig. 2. Cross section of a stick lac belonging to *K. mysorensis* which grows only on *Shorea talura*.

millimeters. Such an encrustation is never seen belonging to the wild species *K. communis*. Taking a piece of stick lac similar to the one shown in Fig. 1 and cutting it horizontally we get to Fig. 2. The insects are specially long with minimum of breadth. Such a case specifies the species *Kerria mysoren-*

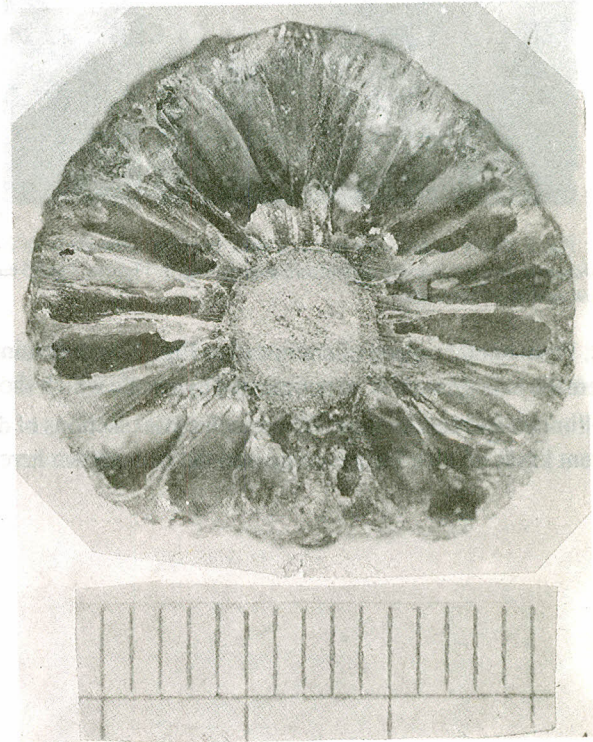


Fig. 3. Cross Section of stick lac of *K. mysorensis*. Scale gives millimeters and centimeters.



Fig. 4. *Kerria communis* on a verticle twig of a *Ficus* tree. The encrustation is the product of a single generation produced by a single bisexual insect. The encrustation completely envelops the twig.



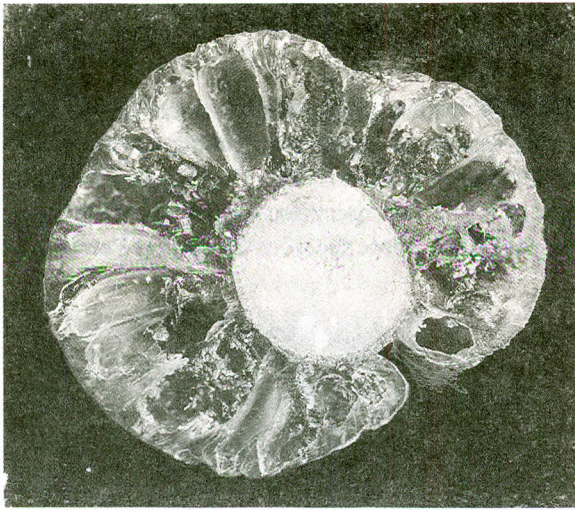


Fig. 5. Cross section of a piece of stick lac of *K. communis* on *Ficus mysorensis*. Insects in width differ from these in Fig. 3. Figures 3 and 5 easily show specific difference.

sis. From another piece of encrustation Fig. 3 was obtained. Here the enlargement is accompanied by a scale which shows millimeter and centimeters. When such cross-sections of different kinds of stick lac are compared the one shown here in

Figs. 2 and 3 would lastly identify itself as belonging to *Kerria mysorensis* and the twig cut horizontally can only belong to *Shorea talura*. The wild species of lac, *Kerria communis* in Mysore is found best on *Ficus mysorensis*. And then as small chunks, as illustrated in Fig. 1. Fortunately I found another species of *Ficus* encrustation of lac all around the twig as shown here in Fig. 4. It was nearly 3 inches long and was produced by a single bisexual insect. This cell is not seen in the picture. However, Fig. 4 is a case of *K. communis* forming an encrustation covering all round a vertical twig. On such a twig of *Ficus mysorensis* I could collect a specimen belonging to *K. communis*. A horizontal section of such a piece of stick lac is seen in Fig. 5. It is enlarged to the same degree as Fig. 3. In Fig. 5 the insects have breadth and are separated obvious difference between Figs. 3 and 5. Both differ when a cross section of *Kerria nagoliensis*, from central India growing there on *schleidera trijuga*, Kusam in vernacular, is composed. This will be discussed in a future article.

**Summary.** *Kerria communis*, a wild lac insect and *K. mysorensis*, a cultivated species reveal specific differences, when cross sections of their stick lac are compared.

**Key words:** Stick, Cross section.