

of cotton in South Africa for some years (see occasional notes in the Journal of the Department of Agriculture.)

With regard to the other injuries attributed to *Dysdercus* it would be interesting to obtain the opinion of the delegates concerning the importance under field conditions of boll shedding due to stainer puncture, failure of the bolls to open normally and loss of lint due to injury to the seed by the same insects. Injury to seeds, affecting germination, appears to be of considerable importance in Southern Rhodesia during the present season. The seeds become very hard and shrivel to a noticeable extent. Whether the injury is purely direct or associated with the development of organisms has not yet been ascertained. The market value of the seed for crushing purposes is stated to be very seriously impaired, and much of it will apparently be unsaleable. It is thought that *Dysdercus* is responsible for this injury, but the question calls for investigation. It appears to have been generally noted that the first infestation of a cotton field with *Dysdercus* develops with great rapidity, and is due to invasion by adults which have matured elsewhere. Notes concerning the stage of development of the crop when this invasion takes place are not altogether in agreement. Thus Pomeroy and Golding in Nigeria state that the invasion commences as soon as the plants flower (R.A.E. XII., p. 67). Withycombe in Trinidad states that the stainers generally appear when the bolls are ripening and not before (R.A.E. XII., p. 548) and, elsewhere, that they are not attracted to the cotton plants in appreciable numbers until the bolls commence to open (Bull. Ent. Res., XV., p. 171). Observations in Southern Rhodesia to date are generally in accordance with the last two statements.

Heavy shedding of the very young bolls, of course, commonly takes place previous to heavy invasion of the fields by *Dysdercus*. This shedding appears to be due to physiological causes, possibly of a similar nature to those causing the well-known "June Drop" of oranges in California, a phenomenon which occurs also in Southern Rhodesia in the corresponding season. Shedding due to *Dysdercus* attack must clearly occur at a later stage and the experience of the delegates as to its regular occurrence or otherwise, following the *Dysdercus* invasion, and its economic significance would be instructive.

The points on which an expression of opinion by the Conference would be specially appreciated include the following:

1. Have any of the delegates any experience of lint-staining occurring under conditions where the agency of *Dysdercus*, or of other sucking insects, is not indicated?
2. Have any of the delegates any experience of lint-staining which is apparently not due to either Bacteria or Fungi?
3. Are any extensive outbreaks of bollrot, due to *Bacillus malvacearum*, Smith, in American "Upland" varieties on record?
4. What is the present position in reference to the association of *Bacillus gossypii*, Stedman, with Bollrot?
5. Have any careful mycological studies been made of bollrot and lint-staining as occurring in Africa, apart from Marsh's work on stained Nyasaland cotton?