MATERIAL AND TECHNIQUES

Collection, Rearing and Preservation:

Collections were made by visiting various important agricultural and horticultural areas of Tarai regions of Northern India during the year 1983-1986. Mostly parasitized eggs and different stages of host insects were collected in situ by detaching pieces of barks, leaves, stems, twigs, pods or other plant parts. At the same time few unparasitized host specimens were also collected individually from the same plant and allowed to emerge to facilitate their correct identification. A complete record was maintained indicating the reference number, locality, date of collection, name of host plant and host insect.

The selected pieces of barks, leaves, stems, twigs, pods or other plant parts were cut into small pieces and put in rearing jars, the mouth being closed with muslim cloth held with a rubber band. A slip was fixed to each jar indicating the reference number. Collections made during the months April, May and October were put in a constant temperature cabinet running at 70°C and with 70% R.H. to expedite the emergence of parasitoids, otherwise the parasitoids were reared under room temperature. The jars were checked daily for the emerged parasitoids.

The emerged parasitoids were removed from rearing jar and preserved in 70% alcohol in glass vials. Whenever larger number of parasitoids emerged, an empty tube of the same size was put in end to end portion over the tube containing parasitoids.
The tube with parasitoids was wrapped with black paper, and the whole assembly was put near a overhead light source. This technique enables the parasitoids to move to the empty tube as a response to light. All the parasitoids thus assembled were preserved. The preserved specimens were then separated up to specific level under stereoscopic binocular. Data regarding the number of specimens of females and males of each species from each sample was also recorded.

**Mounting, Measurements and Illustrations:**

Permanent slides were prepared to enable detailed study of important structures of the parasitoids. The normal process of dehydration was adopted and clearing was done in the clove oil. The specimens were dissected in clove oil medium under the dissecting binocular microscope with the help of fine needles. The dissected parts viz., mouth parts, antennae, pronotum, wings, subgenital plate and external genitalia were placed on a microslide in a drope of Canada balsam while the remaining parts viz., head, legs, thorax on another slide and were oriented into the required position. The dissected parts were later mounted in Canada balsam under a 22-mm square cover glass. The slides were kept in a thermostat at a temperature of approximately 60°C for about one week to make it completely dry. The permanent slides were examined under the microscope in order to make a detailed study of each component of body. This approach has revealed some characters which otherwise are likely to be missed in tag dry mount specimens.
Cards mounts were also made for better understanding of certain characters like color, sculpture etc. of the parasitoids.

Measurements of whole specimens as well as different parts were taken with the help of an ocular micrometer and slide micrometer. The drawings of important structures were made with the help of camera lucida.