

## TEN YEARS OF HAND POLLINATION OF *HEVEA* IN VIETNAM

Hand pollination (HP) of *Hevea brasiliensis* was initiated in Vietnam in the early 1930s. The former IRAFI (Institut de Recherches Agronomiques et Forestieres de l'Indochine), IRCP (Institute de Recherches sur le Caoutchouc en Indochine) and IRCV (Institute de Recherches sur le Caoutchouc au Vietnam) generated a number of clones (Ehret, 1955) but, due to historic events, their HP programmes were cancelled from 1955. Even a few of the improved planting materials which emerged from early screening had not shown any impact on commercial production.

The Rubber Research Institute of Vietnam (RRIV) initiated a breeding programme for generating new potential planting materials, wherein hybridization is one of the key methods, from 1980, to support new projects of restoration and development of rubber in Vietnam. In this paper, the preliminary results obtained from the hybridization programmes are summarized.

Objectives of *Hevea* breeding programmes have been defined with the following three considerations :

Facing the hard challenges of the new century in terms of high rubber yield, precocity and agronomic and technologic qualities of latex.

The projected planting areas in Vietnam comprise the old stands to be replanted in the South-East middleland, and new zones at

higher altitudes (500 m to 800 m above MSL) and latitudes (14° to 20° North) which are diverse in earth relief and pedology, and have unfavourable ecologic conditions like dry and cold seasons and typhoons.

*Hevea* breeding has to deliver potential cultivars not only excelling in latex production, but also, multipurpose trees to be integrated in agro-forestry ecosystems suitable in various sites.

In a ten year schedule, the HP programme consisted of the following experiments :

- (1) Establishment of 2 HP gardens :
  - LH2, 1979 with 56 parent clones
  - LH3, 1984 with 113 parent clones
- (2) Twelve HP programmes (1982-1990)
- (3) Evaluation of HP offsprings in a series of trials (in the conventional manner) :
  - 5 Juvenile screening trails (Jn), 5500 grafted plants/ha.
  - 4 small scale clone trials (SSCT = SG, ST)
  - 5 large scale clone trials (LSCT)
  - 2 three-part-tree small scale trials (ST3F85, ST3F86) :