TECHNOLOGY DEVELOPED BY NRCL

1. Rejuvenation of unproductive senile litchi orchard
   A technology to rejuvenate old, dense and unproductive orchards (>40 yrs) of litchi for better productivity and quality fruit production without disturbing the original plantation through heavy reiterative pruning and other cultural practices has been developed. Rejuvenated trees produce quality fruit within a minimum period of three years. Suitable intercrop for this gestation period has been identified that utilize the created open space and gives income to the farmers in addition to the income from sale of pruned woods. The likely cost of adoption of technology is ₹25000/ ha.

2. Potting mixture for propagation of quality planting material of litchi
   A potting mixture media for healthy and vigorous growth of litchi air-layered seedlings has been developed which gives better establishments of air-layers due to profuse root developments and leads to high survival of air-layers in nursery and field conditions. The cost of production of gooties in this method is ₹ 1.65/ gootie.

3. Technique for off season-layering in litchi
   A technique for raising air-layered litchi planting material through temperature regulation and selection of non-bearing twigs of desired thickness during spring (off-
season) has been standardized. This gives good quality planting materials with an advantage of quick establishment and low gestation and maintenance period.

4. **Litchi based cropping system models**
   Three intercrop models viz., litchi-banana, okra-gladiolus and cowpea-potato-onion has been identified for utilizing interspaces in pre-bearing orchard.

5. **Bagging of litchi bunch for quality litchi fruits**
   A technique of bagging litchi bunches with perforated butter paper or brown paper was developed which results in 34% less cracked and sun-burnt fruits and about 30% higher Class-I fruits.

6. **Bio-intensive management of fruit borer complex of litchi**
   Fruit and seed borer is a major pest of litchi. Several species of *Conopomorpha* damage litchi fruits. An ecofriendly technology has been developed which involve biocontrol agent viz., application of *Trichogramma* and organic products viz., nimbicidine, vermiwash, and *kamdhenu keet niyantrak*.
7. IPM of litchi mite
   An integrated management package has been developed for litchi mite which is one of the important pests of litchi. This involves mechanical and chemical control measures.

8. Preparation of wine from litchi fruits
   A protocol for production of litchi wine has been developed. The wine thus produced has typical litchi aroma, 10-12% alcohol and is rich in natural anti-oxidants. The raw material and production cost is about ₹120 per 750 ml wine.

9. Technique for preparation of litchi nut
   A simple technology for dehydrated litchi nut from fresh fruit has been developed which has a shelf life of 10-12 months. One kg of litchi nut can be obtained from 4 kg fresh litchi fruits. The technology involves dehydrating the pre-treated fruits under shade, sun and cabinet tray drier, alternatively.