

# Methods of Gene Transfer

The next step after a recombinant DNA molecule has been generated is to introduce it into a suitable host cell. There are many methods to introduce recombinant vectors and these are dependent on several factors such as the vector type and host cell.

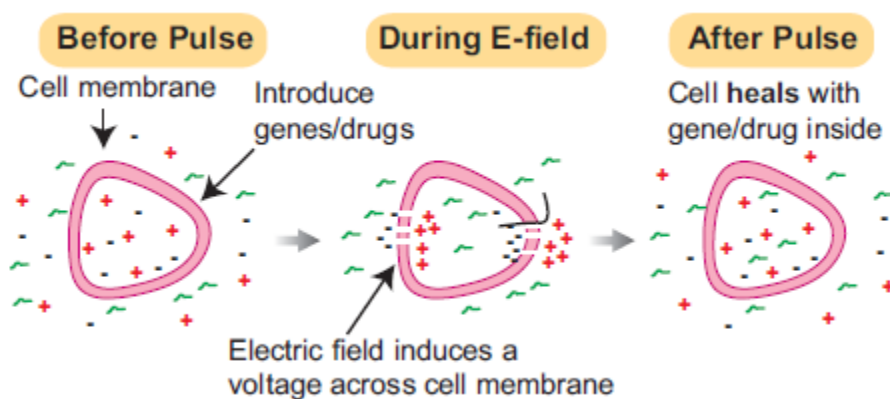
For achieving genetic transformation in plants, the basic prerequisite is the construction of a vector which carries the gene of interest flanked by the necessary controlling sequences, i.e., the promoter and terminator, and delivers the genes into the host plant. There are two kinds of gene transfer methods in plants. It includes:

- Direct or vectorless gene transfer
- Indirect or vector – mediated gene transfer

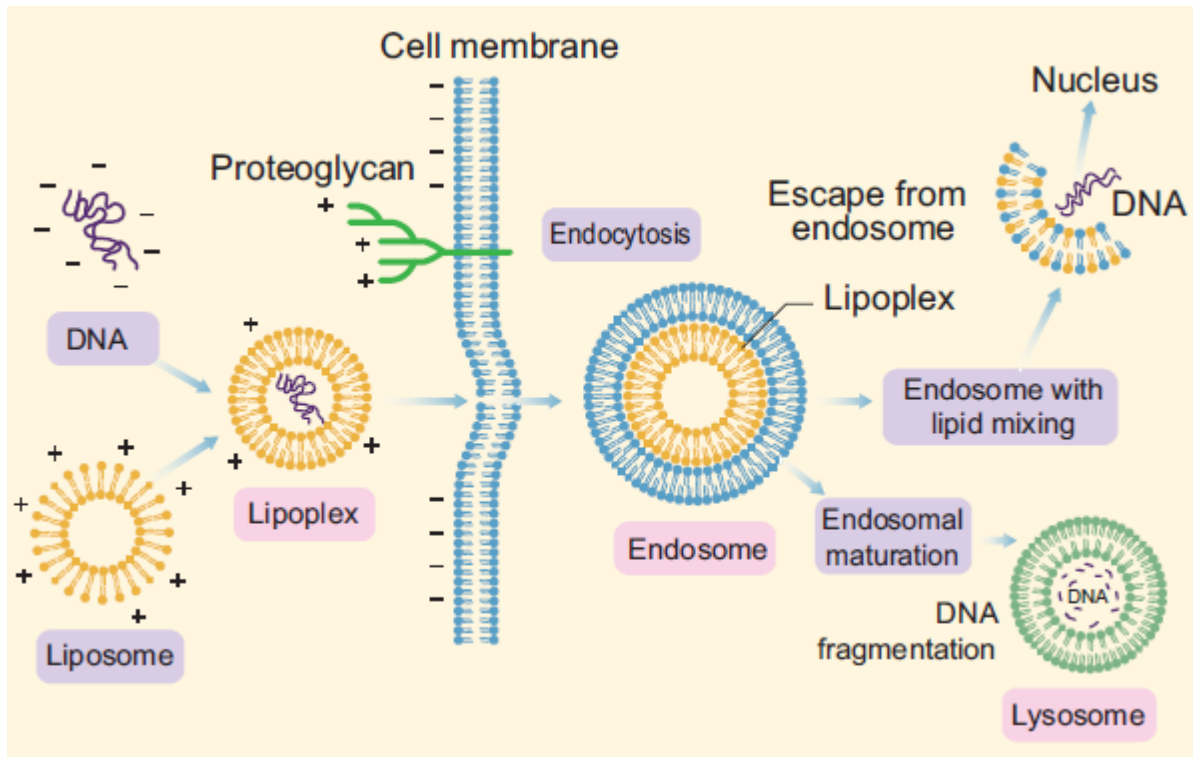
## Direct or Vector less Gene Transfer

In the direct gene transfer methods, the foreign gene of interest is delivered into the host plant without the help of a vector. The following are some of the common methods of direct gene transfer in plants

1. Chemical mediated gene transfer
2. Microinjection
3. Electroporation Methods of Gene Transfer



## 4. Liposome mediated method of Gene Transfer



## 5. Biolistics

