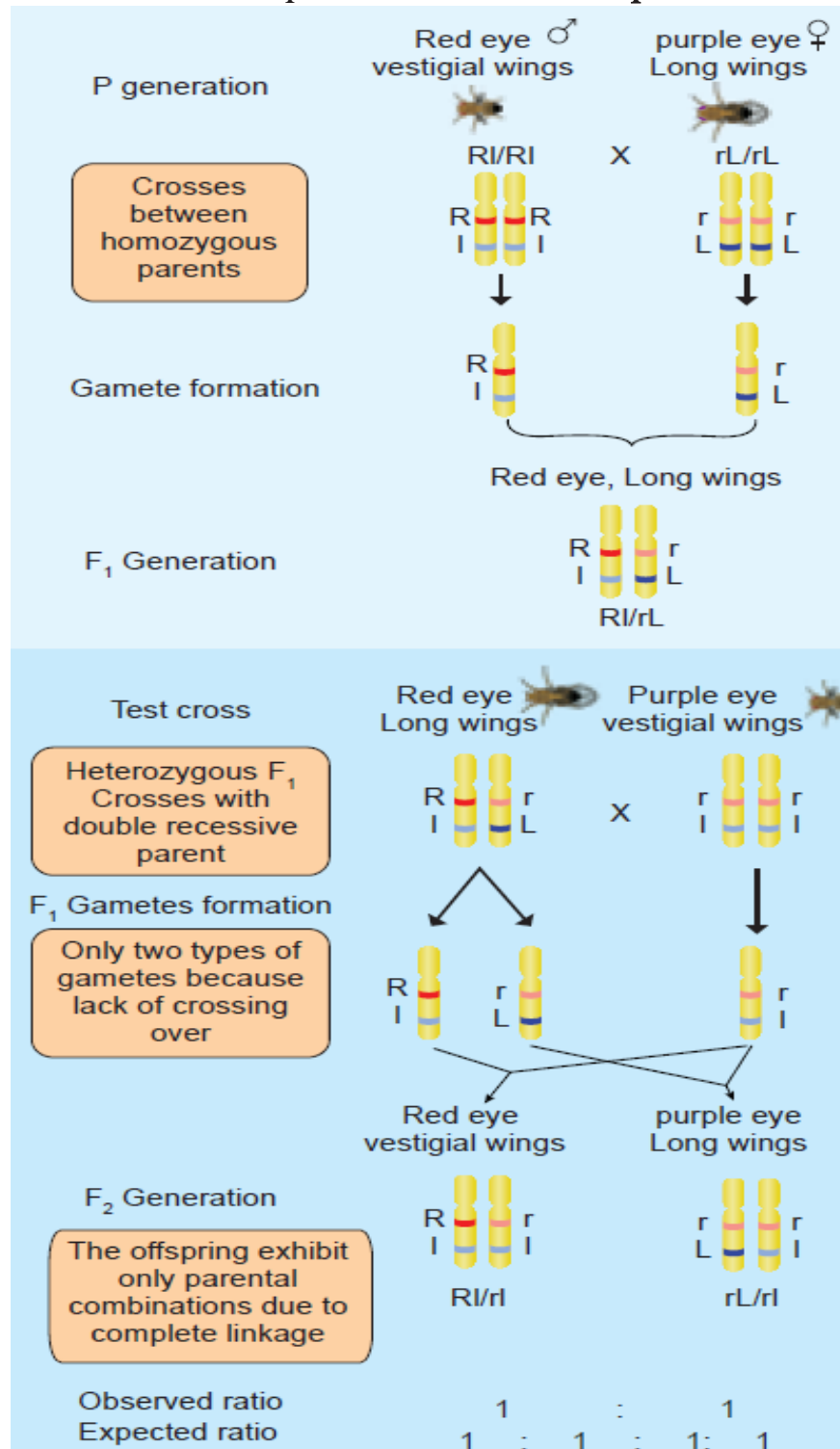


Complete Linkage and Incomplete Linkage

Complete Linkage

If the chances of separation of two linked genes are not possible those genes always remain together as a result, only parental combinations are observed. The linked genes are located very close together on the same chromosome such genes do not exhibit crossing over. This phenomenon is called **complete linkage**. It is rare but has been reported in male **Drosophila**. **C.B Bridges** (1919) discovered that crossing over is completely absent in some species of male **Drosophila**.



Incomplete Linkage

If two linked genes are sufficiently apart, the chances of their separation are possible. As a result, parental and non-parental combinations are observed. The linked genes exhibit some crossing over. This phenomenon is called **incomplete linkage**. This was observed in maize. It was reported by Hutchinson.

