③ Origin of Galeopsis tetrahit → It is an allow tetraploid with (2n = 32). It was derived from a cross between Gr. pubescens and Gr. speciosa. The F_1 hybrids were sterile showing almost complete lack of pairing. This deficulty is over come by doubling of chromasome number.

Galeopsis pubescens (2n = 16, 8 bivalent) × Galeopsis speciosa (2n = 16, 8 bivalents)

↓

F_1 hybrid (2n = 16, 16 univalent)

↓ chromasome doubling

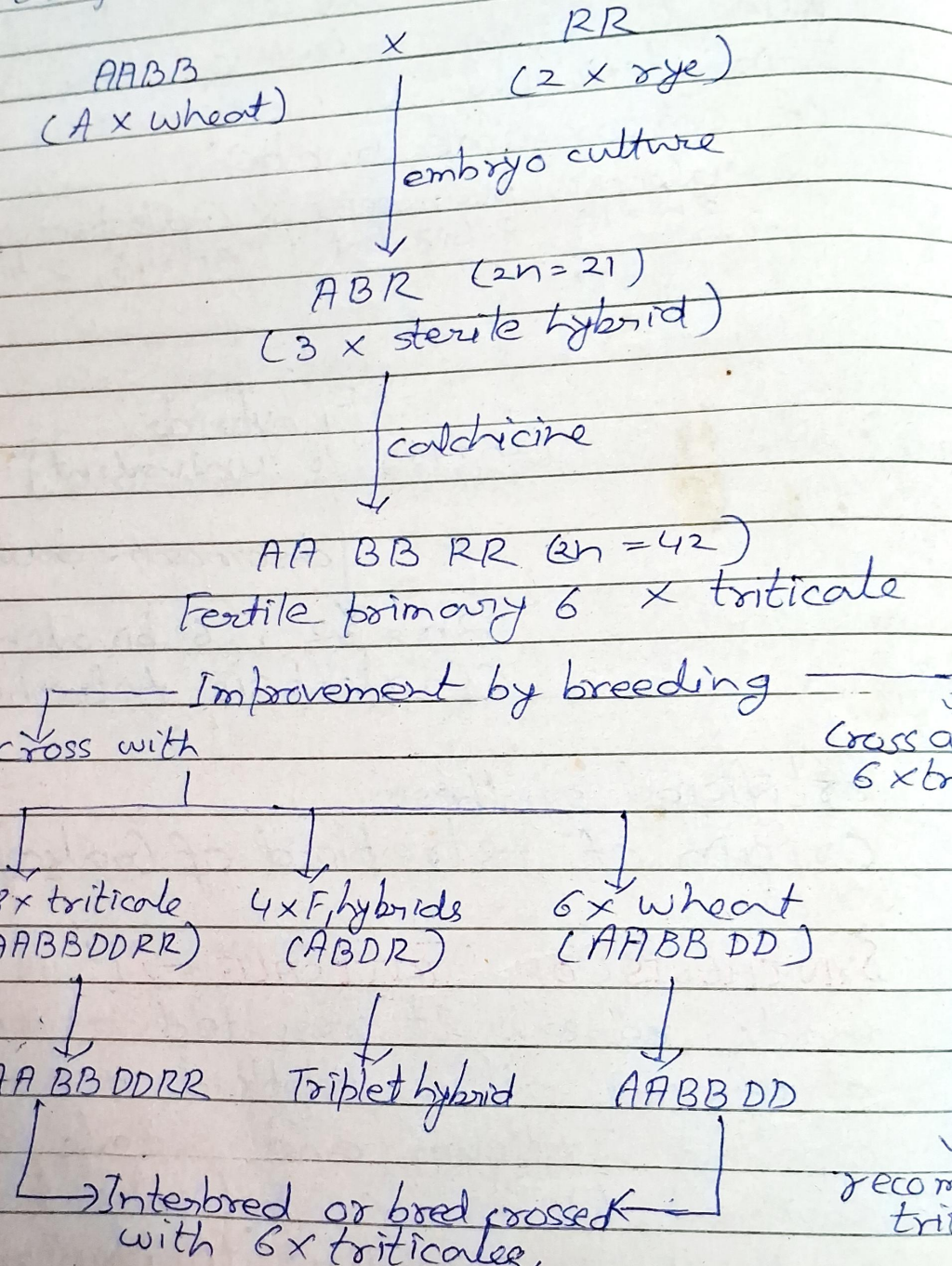
2n = 32, 16 bivalents (Galeopsis tetrahit)

~~Artificial synthesis~~ hit
Origin of tetraploid of Galeopsis tetra

SYNTHESIS OF TRITICALE → It is a man made cereal. It resulted as an artificial allow polyploid derived by crossing Triticum and secale cereal. Several kinds of Triticales have bee synthesized. According to Muntzing (1979) Gupta (1984, 85, 87) and Priyadarsha (1982) as many as 150 cultivires of Triticale have been released during

the last 10 years.

The methods of origi
of different triticales can be shown
as follows.



① True 6x triticales.

② Substitutional 6x triticales.

CONCLUSION → The above examples indicate that a numbers of natural polyploids have originated by process which can be duplicated in laboratory. Since, the products obtained in laboratory, resemble those found in nature. The method used in laboratory indica-ted evdutionary path which must have been followed in nature in remote past. It is also believed that the most of the naturally occuring polyploid are neither true autopolyploids nor true allo~~s~~ polyploids but are ~~w~~eather segmental polyploids.