

MK: Biologi Umum

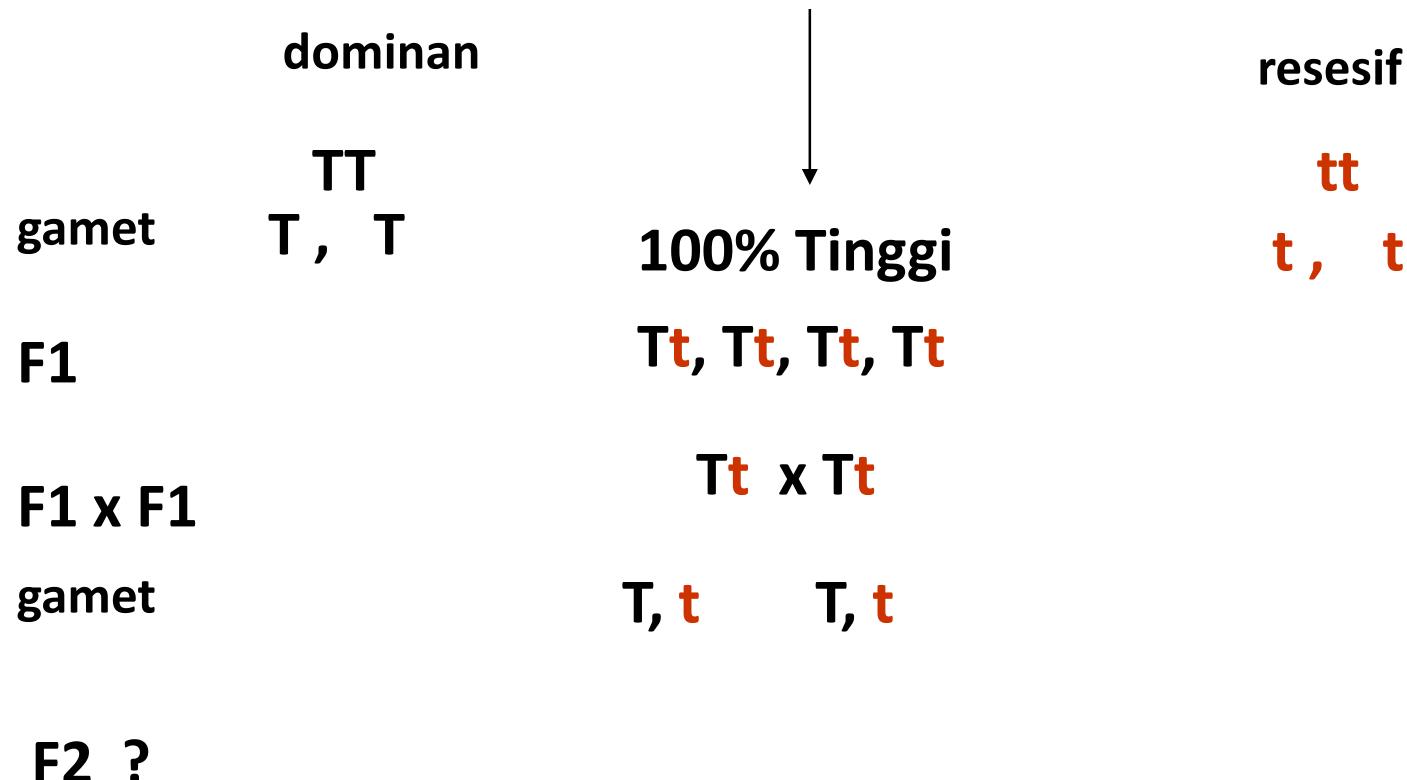
03. Monohibrid

Diah Kusumawaty, M.Si

Jurusan Pendidikan Biologi FPMIPA UPI

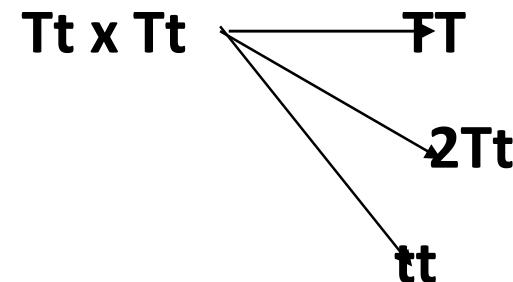
Persilangan dengan satu tanda Beda (Monohibrid) – dominan sempurna

- P: Tumb. Tinggi x Tumb. Pendek



F2

|  ♀ |  ♂ | T | t |
|---|---|--------------|---|
| T | TT tinggi | Tt tinggi | |
| t | Tt tinggi | Tt pendek | |



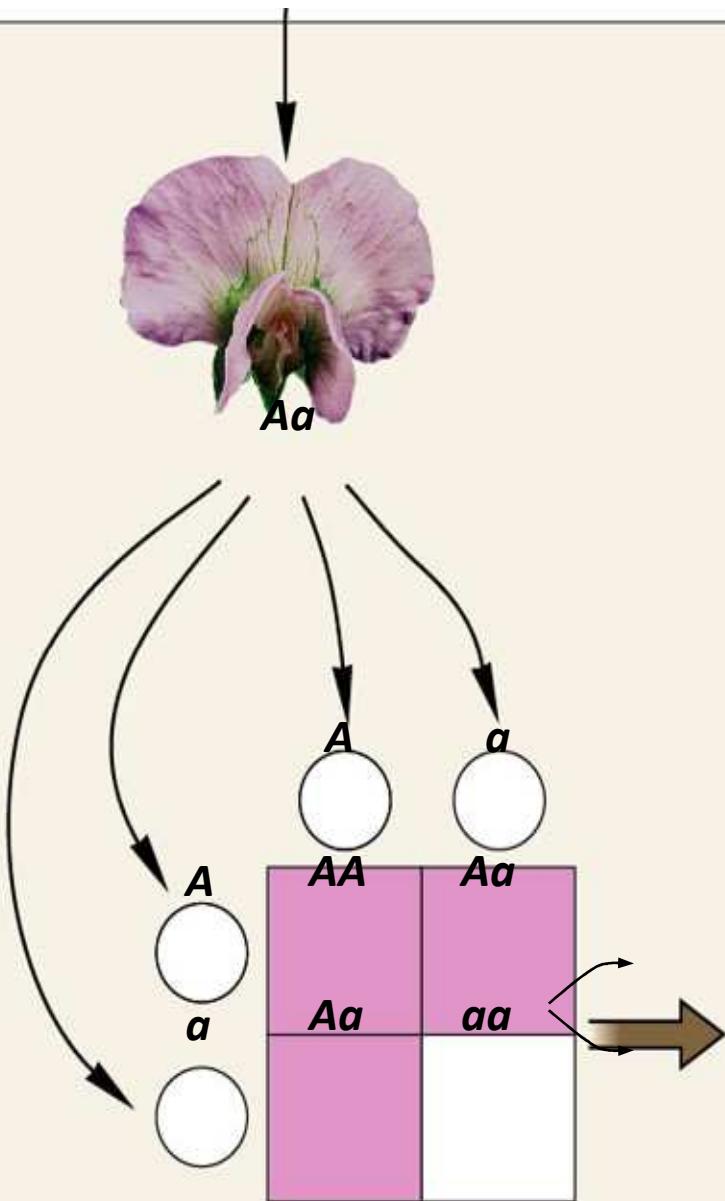
Rasio fenotip : 3 Tinggi : 1 pendek

Rasio genotip : 1 (TT) : 2 (Tt) : 1 (tt)

!!!!!!

- $TT \times tt$: 100 % Tt
- $Tt \times tt$: 50% Tt , 50% tt
- $Tt \times Tt$: Tt , 2 Tt , tt
- TT/tt : jenis gamet 1 (T/t)
- Tt : jenis gamet 2 (T dan t)

An F_1 plant
self-fertilizes
and produces
gametes:



F_2 PHENOTYPES:

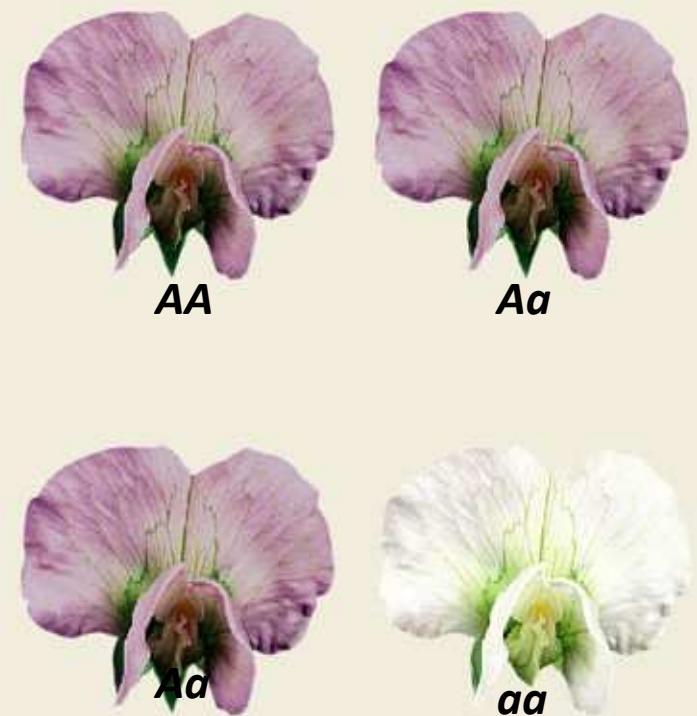
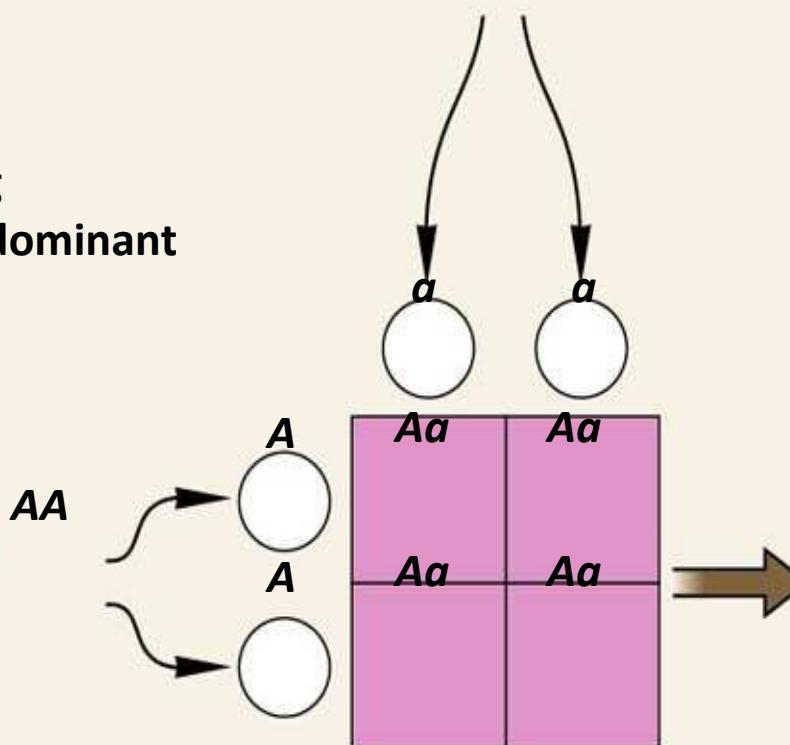


Fig. 8-6b, p.115

True-breeding
homozygous
recessive
parent plant



True-breeding
homozygous dominant
parent plant



F₁ PHENOTYPES:

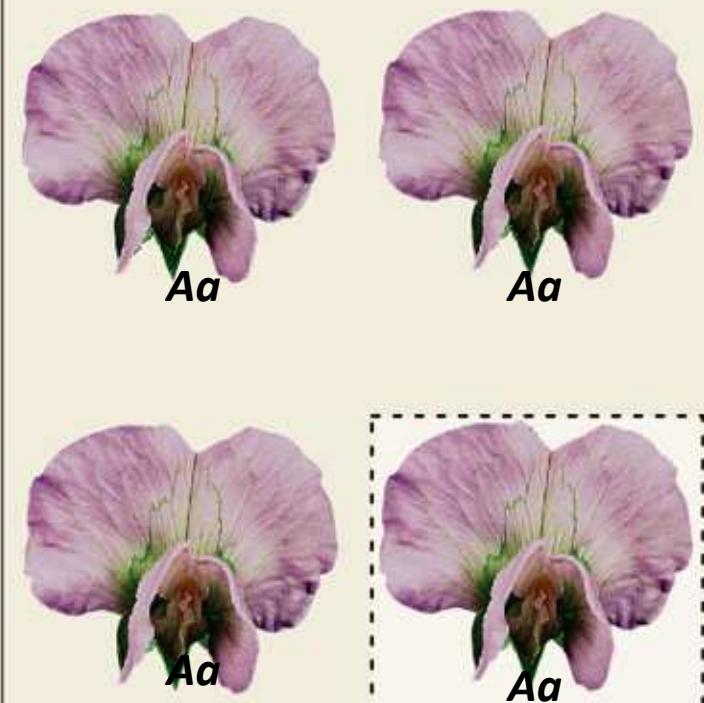
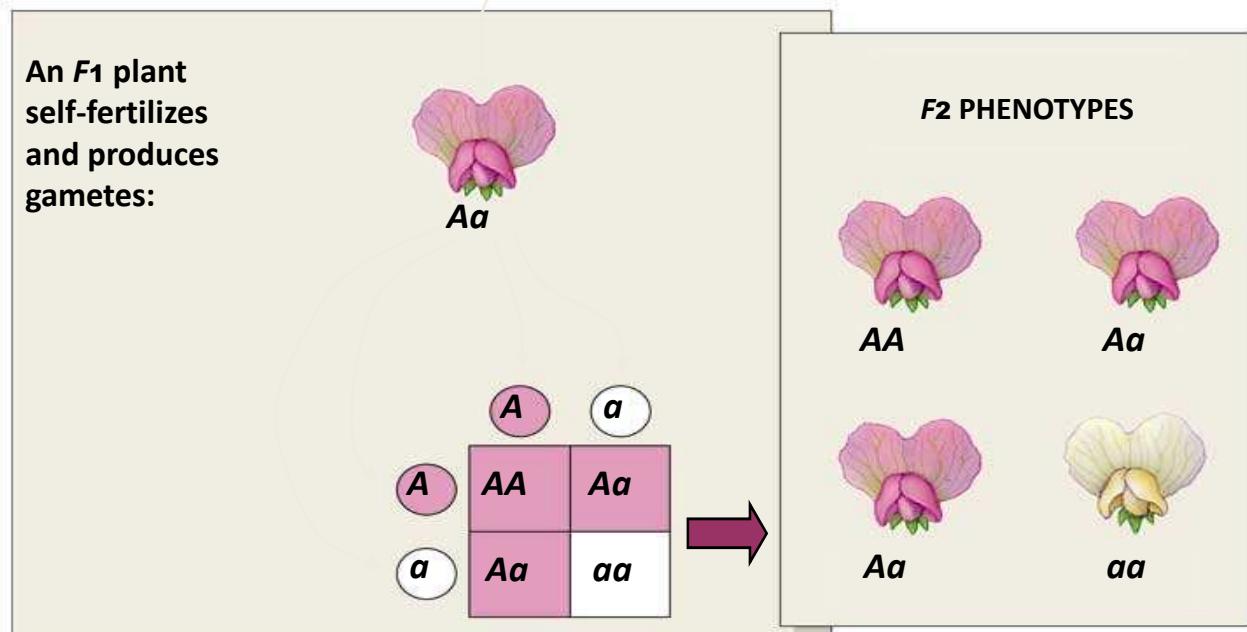
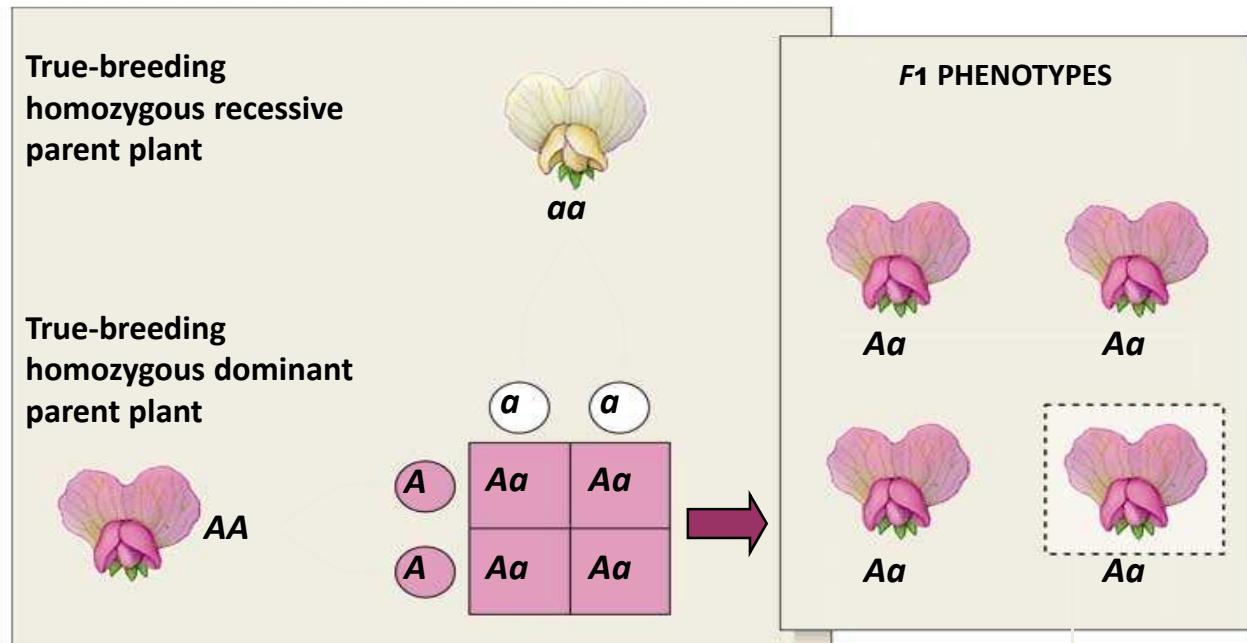


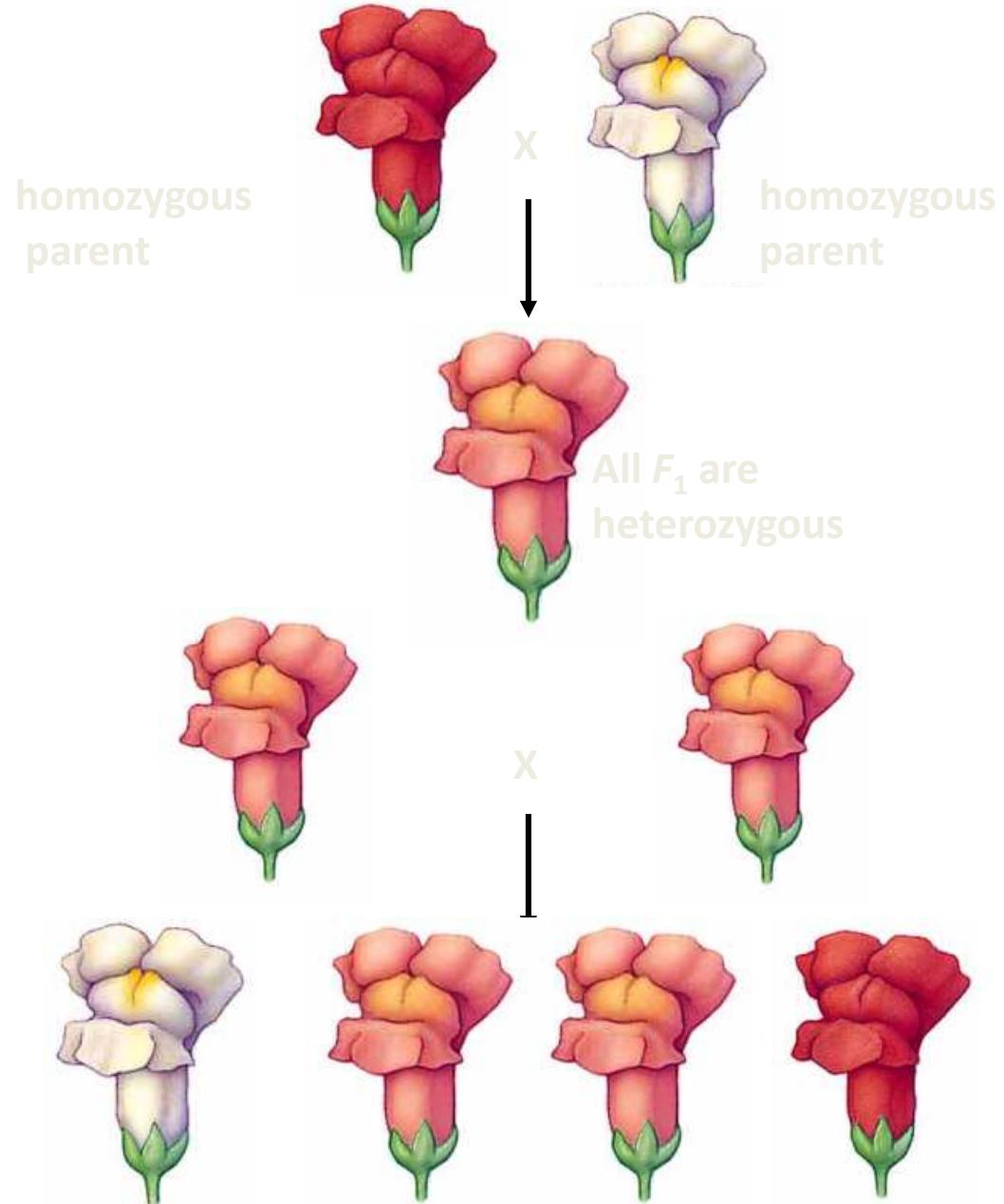
Fig. 8-6b, p.115

Monohybrid Cross Illustrated



Incomplete Dominance

Genotype ratio
equals
phenotype ratio



F_2 shows three phenotypes in 1:2:1 ratio

Latihan 1

1. Berapa jumlah jenis gamet yang dihasilkan?

- TT
- Tt
- AAbbCCdd:
- AABbCcDd:

2. Berapa jumlah jenis genotip yang dihasilkan?

AaBb x AaBB

AABbCcDd x AAAbCcdd

AABBCCDD x aabbCCdd