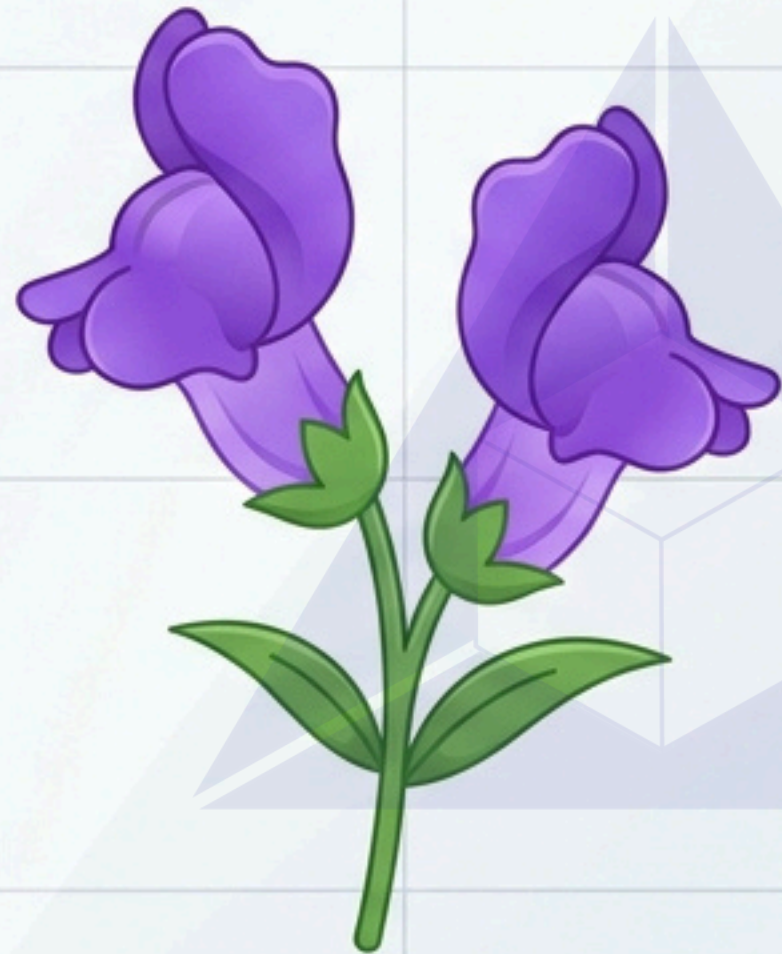


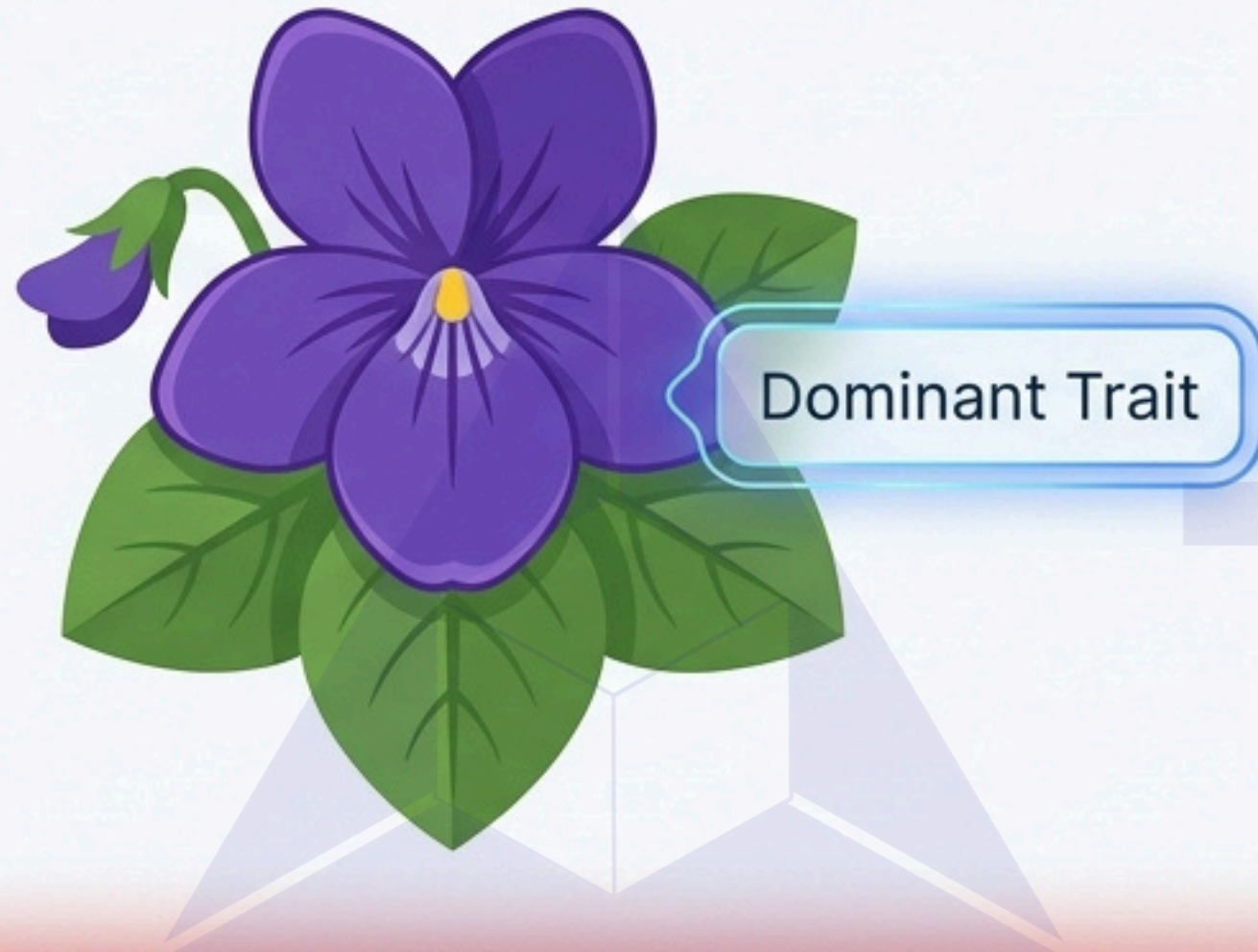


Test Cross

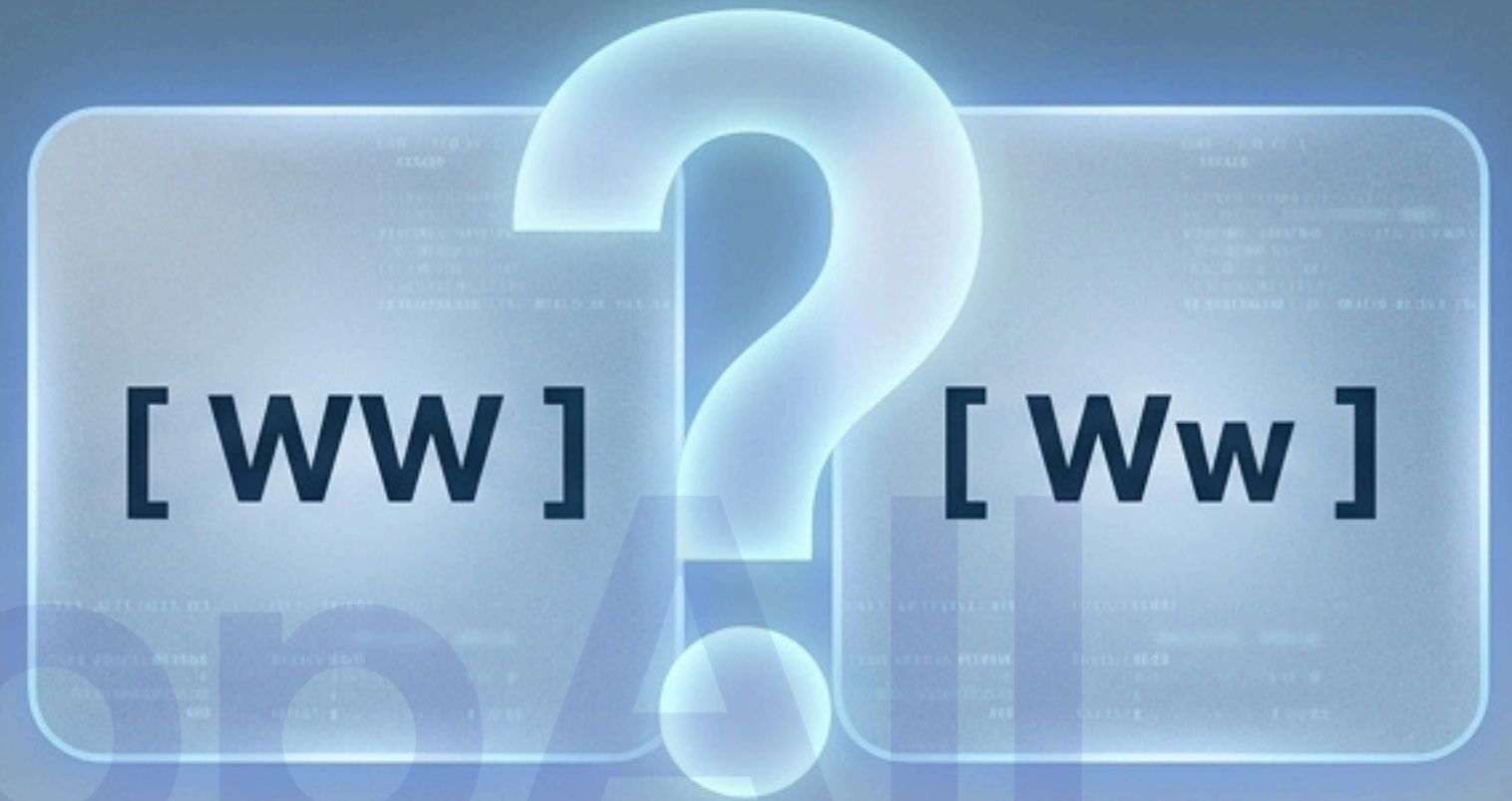
Decoding the hidden genotype.

A Diagnostic Framework
for Mendelian Genetics.

What the eye sees (Phenotype)



What the DNA holds (Genotype)



MISTAKE: ASSUMING PHENOTYPE = GENOTYPE.

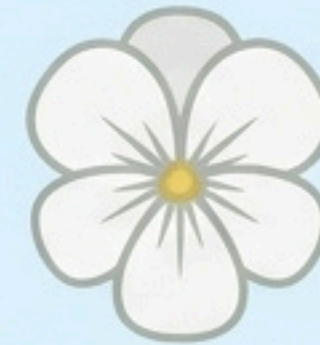


By simply looking at the phenotype of a dominant trait, it is not possible to know the genotypic composition. We cannot see alleles.



[?]

(Unknown Genotype)



[ww]

(Homozygous Recessive)

Test Cross: An organism showing a dominant phenotype (but unknown genotype) is crossed with a recessive parent instead of self-crossing.

Why use a recessive parent?

Recessive alleles (w) only express themselves in the absence of dominant alleles. They act as a blank canvas, preventing the known parent from masking the unknown parent's contributed alleles.



You've Learned the Theory. Let's Test Them Now.

$$E=mc^2$$



Turn theory into marks with **unlimited MCQs, smart analysis, and focused revision.**

Practice Now



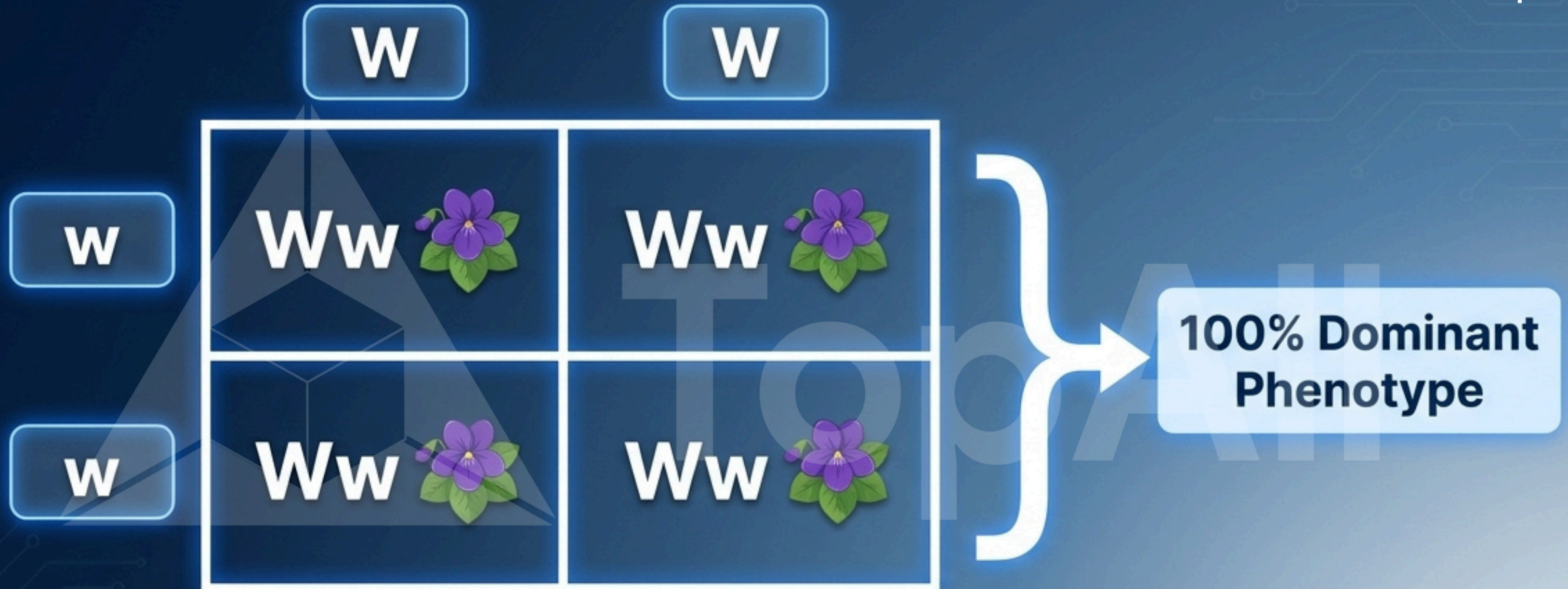
At prep.topall.app

Key Highlights

- » Free Study Material, Videos & Infographics
- » Push Your Limits with Level-Based Challenges
- » Climb the Leaderboard Among Fellow Aspirants
- » Practice Unlimited MCQs for NEET & JEE
- » Get Clear Explanations, Not Just Marks
- » Track Your Performance Smarter



Unknown parent (WW) x Recessive (ww)



Success-Green Card

Result A: All dominant offspring = Homozygous Dominant parent.

Unknown parent (WW) x Recessive (ww)



Success-Green Card

Result B: 1:1 ratio = Heterozygous parent.

Column 1 If Offspring Result...	Column 2 ...Then Hidden Genotype is	Column 3 Diagnostic Label  TopAll
	[WW]	Homozygous Dominant
	[Ww]	Heterozygous

Test cross reveals hidden genotype.

By reading the phenotype of the offspring, we decode the hidden DNA of the parent.



You've Learned the Theory.

Now Let's Test It.

Reading notes gets you knowledge.

Practicing MCQs gets you marks.

That's exactly what TopAll Pro is built for.

Try TopAll Pro Now

What TopAll Pro Does Differently

-  **Stuck? Snap it. Solve it. — Doubts AI**
Photo → step-by-step solution in seconds, 24/7
-  **Your AI Coach finds your blind spots**
Concept-level weakness detection — not just chapter-level
-  **4.5 Lakh+ questions. Never run out.**
13× more content than any other prep app in India
-  **Build your own test in 60 seconds**
Pick a chapter, set difficulty — AI does the rest instantly.
-  **AI Recommendation that helps you improve**
AI Recommendation Analysis your Tests and tell you where you need to improve.



Practice the moment you finish studying
Jump in while the concept is still fresh in your head

4.5L+
MCQs

1.5L+
Students

AI Powered
In-Depth Analysis