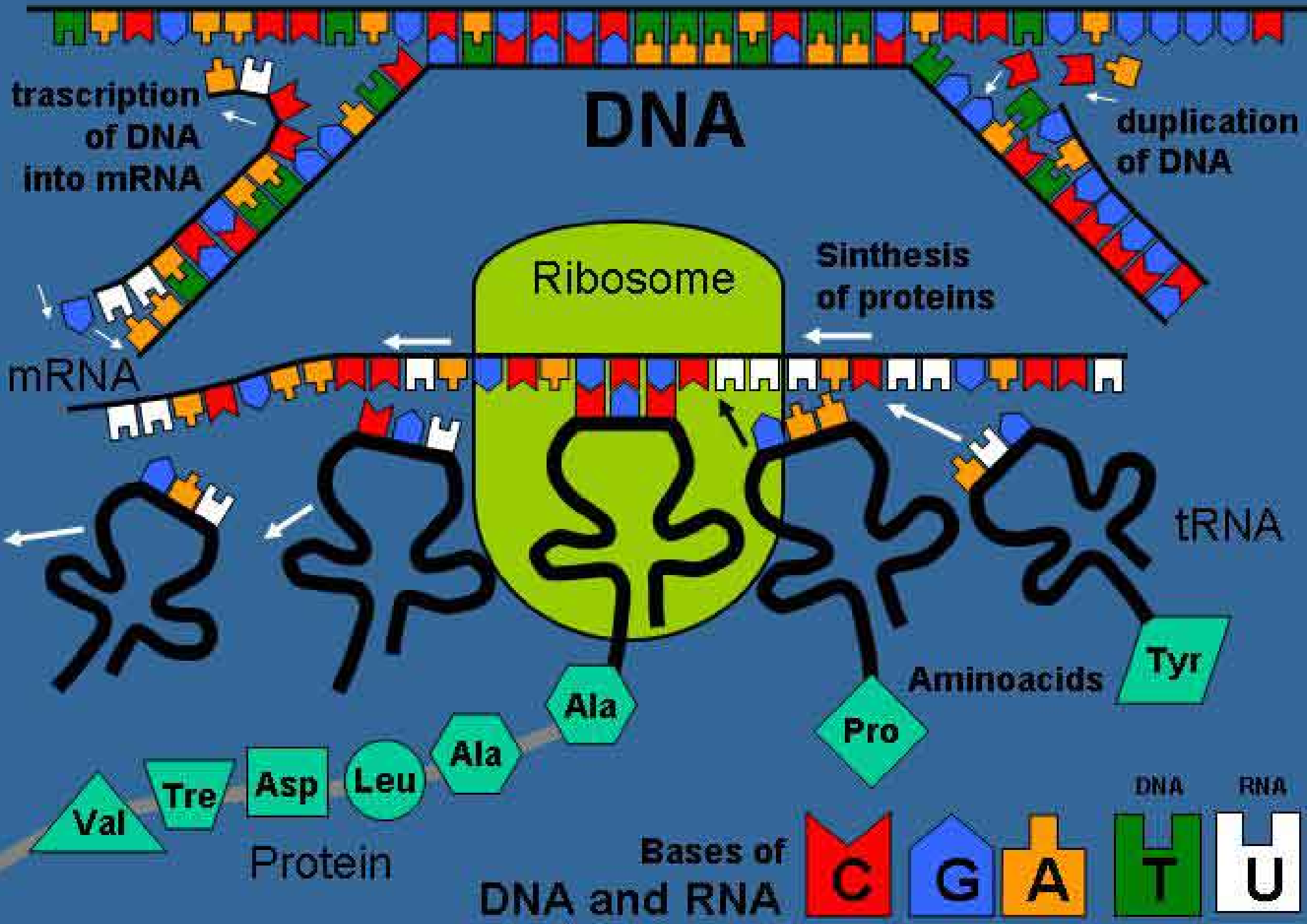


The revolution of molecular biology



POPLARS AND MOLECULAR BIOLOGY

Poplars are very easily propagated *in vitro*

Poplars can be easily modified genetically

Populus genome is very small; in 2004 the complete sequencing will be achieved



Understand gene action

Select for or against specific genes

Guide genetic transformation events

In vitro culture







GENETICALLY MODIFIED POPLARS

Advantages

- Genes from outside the genus *Populus*
- Point modification, no genetic load
- Quick scale-up, return from investments
- No risk for man and domestic animals

Environmental concerns

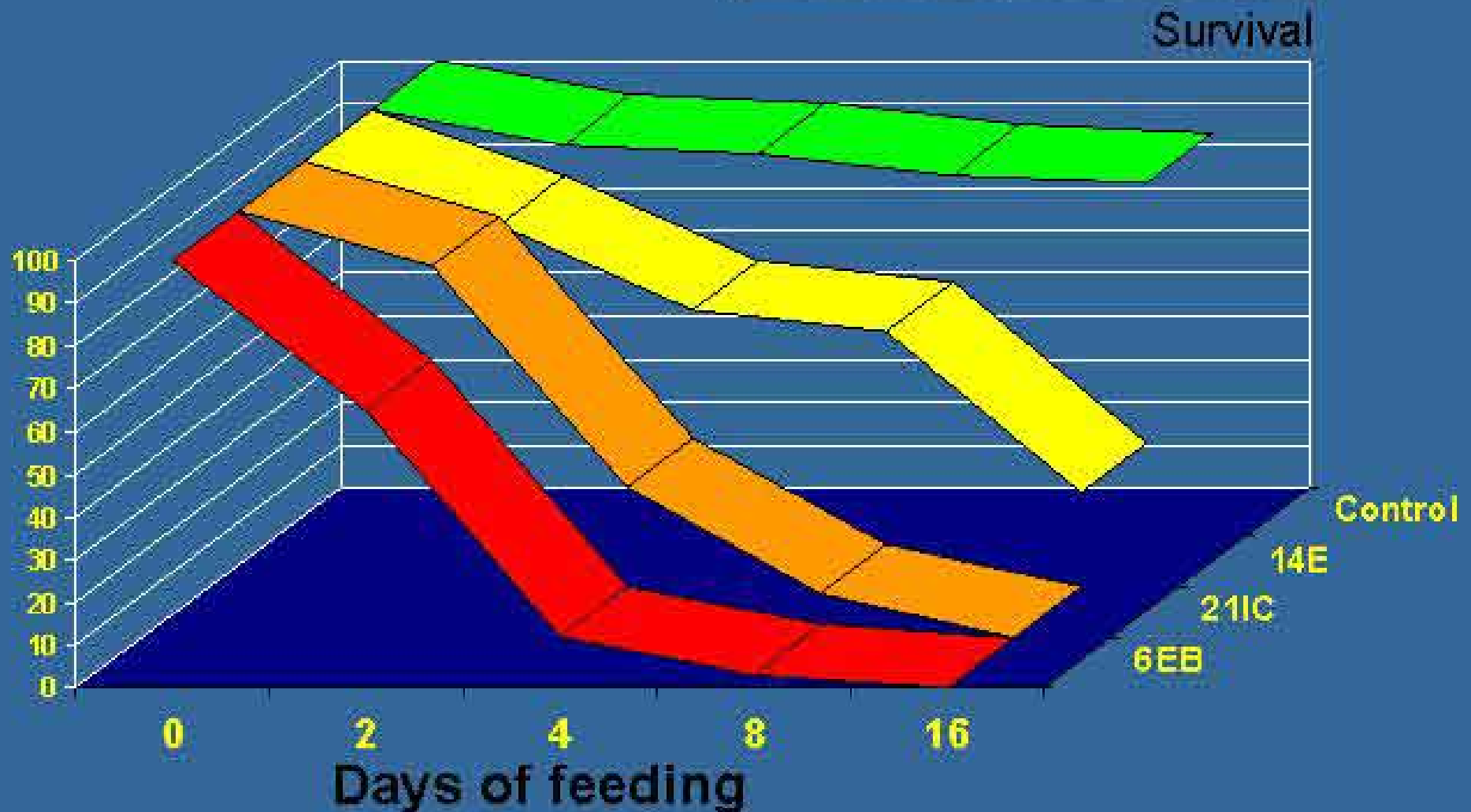
- Creation of invasive lines
- Undesired effect on non-target insects
- Selection of resistant insect strains

Application will depend on future public attitude

Goals of GM poplars

Resistance to insects

- Protease inhibitors



Multiple breeding strategies

