Using the scale below, write the number in a blank on the left that best characterizes your belief about the validity of each claim on the right.

[1 = CERTAINLY FALSE, 2 = PROBABLY FALSE, 3 = NOT SURE BUT SUSPECT THE CLAIM MAY BE FALSE, 4 = NOT SURE BUT SUSPECT THE CLAIM MAY BE TRUE, 5 = PROBABLY TRUE, 6 = CERTAINLY TRUE]

1. Inbreeding decreases plant fitness.
2. Competition between species is necessary for evolutionary change.
3. Plants cannot evolve by natural selection because their genome is too small.
4. Nuclear DNA is less radioactive than chloroplast DNA.
5. Species are defined by reproductive isolation.
6. Biology provides a sufficient basis for plant conservation decision-making.
7. Individuals evolve.
8. Evolution results in continual and progressive improvements.
9. Evolutionary biology is compatible with a belief in a creative god.
10. Declining populations are no longer undergoing evolutionary changes.
11. Natural selection is survival of the fittest.
12. Evolution is natural selection.
13. An individual plant’s height is determined by genes and environment.
14. Natural selection requires immense amounts of time.
15. Individual traits evolve for the good of the species.
16. Evolutionary principles predict balanced ecological communities.
17. "Nothing in biology makes sense except in the light of evolution."
18. An ever-branching tree is an appropriate metaphor for evolutionary diversification.
19. Human head size will shrink over evolutionary time due to our reliance on computers.
20. Evolution by natural selection cannot be directly observed.
21. Plants will adapt to global climate change.
22. Evolution causes changes in gene (i.e. allele) frequencies within populations.
23. Genetic diversity is good.