

## KEY TO SIMULATED ELEPHANT DNA RFLP SIZES AND MARKER SIZES

$\lambda$  (lambda) is ~48,502 bp, depending on the strain. It has 12 bp single-stranded cohesive (*cos*) or sticky ends with complementary sequence that can bind each other within the same molecule or in another  $\lambda$  molecule. At room temperature, these *cos* ends do like to stick together resulting in changed DNA band sizes. (To prevent this, samples can be heated gently before running on the gel.)

*\* means that these are end fragments-they may be faint on gels if the samples are not heated before running.*

### Seringeti ( $\lambda$ EcoR I – Marker I)

1. 21,226\* left end
2. 7,421
3. 5,804
4. 5,643
5. 4,878
6. 3,530\* right end

### 1 kb Plus ladder (Invitrogen)

1. 12,000
2. 11,000
3. 10,000
4. 9,000
5. 8,000
6. 7,000
7. 6,000
8. 5,000
9. 4,000
10. 3,000
11. 2,000
12. 1,650
13. 1,000
14. 850
15. 650
16. 500
17. 400
18. 300
19. 200
20. 100

### South Luangwa ( $\lambda$ Hind III – Marker II)

1. 27,500 present when sample not heated before running
2. 23,130\* left end
3. 9,416
4. 6,551
5. 4,361\* right end
6. 2,322
7. 2,027
8. 564 } faint
9. 125 } "

### Ivory DNA ( $\lambda$ BamHI – student digest)

1. 16,800
2. 12., 200
3. 7,200
4. 6,500
5. 5,600

### Etosha ( $\lambda$ EcoR I + Hind III – Marker III)

1. 21,226\* left end
2. 5,148\*
3. 4,913
4. 4,268
5. 3,530\* right end
6. 2,027
7. 1,904
8. 1,584
9. 1,375
10. 947
11. 831
12. 564} faint
13. 125} faint

