

2(a)(i)		<i>E. turcicum</i>	<i>Z. mays</i>
	1 structural difference	chitin cell wall or no chloroplasts or hyphae / cells long and branching or syncytial / multinucleate / several nuclei per cell	cellulose cell wall or chloroplasts or no hyphae / cells not long and branching or one nucleus per cell ;
	2 functional difference	heterotroph(ic) / parasitic / obtain food from host / do not photosynthesise	autotroph(ic) / phototrophic / photosynthesis(e) ;
2(a)(ii)	any four from: 1 large groups divide into smaller groups ; 2 common / similar / shared, features within a group ; 3 <i>ref. three of:</i> kingdom – phylum – class – order – family ; 4 genus and species = binomial / Linnaean / Latin / scientific, name ; 5 (both in domain) Eukarya ; 6 different kingdoms / Fungi and Plantae ;		
2(b)(i)	any two from: 1 low percentage leaf damage means high resistance (to infection) ; 2 SKV50 = 22% <u>and</u> CML153 = 58% ; 3 SKV50 shows greater resistance (to infection) ;		
2(b)(ii)	continuous ;		
2(b)(iii)	any four from: 1 many / different / several / multiple, genes ; 2 affect, same trait / (percentage) area of leaf damage / resistance ; 3 <u>alleles</u> of, one / each, gene have a small effect ; 4 (different) <u>genes</u> have, additive / combined / interactive, effects ; 5 mathematical treatment to illustrate additive effect ;		

7(a)	1 phylum ; 2 order ; 3 <i>Strigops</i> ;
7(b)	any three from: 1 no / few, humans ; 2 no / few, predators ; 3 sufficient, vegetation / food ; 4 places to hide during day ; 5 AVP ;
7(c)	any four from: 1 inbreeding depression / little hybrid vigour ; 2 low / decreased, genetic, diversity / variation or small gene pool ; 3 disadvantageous recessive alleles (more likely to be) expressed ; 4 infertility / low disease resistance / reduced fitness ; 5 low / decreased, ability to adapt or high / increased, risk of extinction ; 6 AVP ;

9(a)

any **three** from:

1 (domains are) Archaea and Bacteria ;

2 membrane lipids ester-linked (Bacteria) vs. ether-linked / not ester-linked (Archaea) ;

3 single type of rRNA (Bacteria) vs. 3 types (Archaea)

or

Archaea, rRNA / ribosomal subunit, similar to eukaryotic ;

4 peptidoglycan (Bacteria) vs. not peptidoglycan / different (Archaea) ;

5 AVP ;

9(b)

taxon	name
domain	Eukarya ;
kingdom	Animalia ;
phylum	Chordata
class	Mammalia
order	Carnivora
family	Felidae
genus	<i>Panthera</i> ;