

GEN-07-75/1



GENETIC DIVERSITY AND NATURAL SELECTION

JAMES MURRAY

*Department of Biology
University of Virginia*

جامعة وهران 1. أحمد بن بلة
كلية علوم الطبيعة والحياة
مكتبة الكلية
من رقم: 4534
الرقم: 4534

Entré à l'inventaire le 5 JUIN 1973
Sous le N° 29377

سجل في 11 NOV 2010
رقم المكتبة: 4534

OLIVER & BOYD · EDINBURGH



Contents

PREFACE	v
1. INTRODUCTION	i
2. POLYMORPHISM	4
Indirect estimates of heterozygosity; direct estimates of heterozygosity and polymorphism; an independent estimate of heterozygosity in man; the maintenance of polymorphism; neutrality of alleles; heterosis; conclusions	
3. FREQUENCY-DEPENDENT SELECTION	24
The theory of frequency-dependent selection; non-random mating; predator-prey relationships; parasitism and disease; competition; disruptive selection; conclusions	
4. THE EVOLUTION OF DOMINANCE	50
Fisher's theory; experimental modification of dominance; traditional criticisms of Fisher's theory; recent debate; O'Donald's theory; increasing the proportion of heterozygotes; the problem of rare dominants; conclusions	
5. THE WALLACE EFFECT	65
Incipient isolation; artificial selection for isolation; hybrid zones; partially sympatric species; species pairs; against the Wallace Effect; conclusions	
6. PARAPATRIC SPECIATION	87
Artificial selection and isolation; gradients of selection in natural populations; the reinforcement of clinal changes; area effects; conclusions	

