
Contents

	Preface	vii
Part One	Principles	1
1	Plant Science and Human Welfare	3
2	Cell Structure and Function	15
3	Vegetative Growth and Development	39
4	Reproductive Growth and Development	63
5	Plant Classification and Nomenclature	86
Part Two	Plants and Their Environment	95
6	Soils and Crop Production	97
7	Moisture and Crop Growth	122
8	Light and Temperature	146
9	Insects, Diseases, and Weeds	164
10	Cropping Systems and Resource Conservation	194
Part Three	Production Practices	213
11	Marketing Crop Products	215
12	Seeds and Seeding	227

13	Cereals and Man	247
14	Corn and Sorghum	259
15	Rice	281
16	Wheat	291
17	Barley	311
18	Oats and Rye	325
19	Edible Legumes and Man	337
20	Soybeans	345
21	Peanuts	359
22	Field Beans and Peas	371
23	Cotton	383
24	Tobacco	397
25	Sugar Beets and Sugarcane	411
26	Potatoes	431
27	Safflower, Rapeseed, Flax, and Sunflower for Oil	443
28	Forages and Man	463
29	Forage Legumes	470
30	Forage Grasses	493
31	Forage Management and Utilization	508
32	Progress Through Research	523
	Glossary	539
	Index	558