

Contents

Part I Origin and Development of a Pioneer Plant Pathologist

1	Introduction	3
1.1	Greatness Forgotten	3
1.2	Documents and Letters	5
	References.....	6
2	Scotland & England	7
2.1	Scottish Origin and Early Years	7
2.2	Fascination with Geology	7
2.3	Undergraduates in London.....	9
2.4	Teaching Atlases and English Texts.....	10
2.5	Academia in Edinburgh	14
	References.....	15
3	Highly Educated Non-graduate	17
3.1	Proof of Appointments in Edinburgh.....	18
3.2	Academic Career	19
3.3	Search for Greener Fields	21
	References.....	22
4	Australia Felix	25
4.1	Establishment in Australia	25
4.2	Ormond College.....	26
4.3	Auld Po-Tarsh: Victorian College of Pharmacy.....	28
4.4	Research and Other Occupations 1884–1890.....	29
4.5	A New Vocation Beckons	30
4.6	Natural Sciences in Nineteenth Century Europe	31
4.7	Australia 1788–1890.....	35
4.8	Formal Courses in Plant Pathology	37
	References.....	39

5	Vegetable Pathologist	41
5.1	Devastating Epidemics.....	41
5.2	Founding Australian Plant Pathology	45
5.3	Renowned Mycologist	48
5.4	McAlpine's Training in Mycology	51
5.5	Hallmarks of Rigour and Accuracy	53
5.6	Six Australian Books	54
5.7	Extra Mural Activities.....	61
	References.....	64
6	Twenty Years of Plant Pathology in Australia 1890–1910	67
6.1	In McAlpine's Own Words	67
6.2	What Constitutes Plant Pathology	68
6.3	Its Aims and Objectives	68
6.4	Means Provided for Investigation and Research.....	69
6.5	Some of the Work Accomplished	70
6.6	Problems Awaiting Solution	72
6.7	How This Study Has Benefited the Producer	73
6.8	Conclusion	74
6.9	International Recognition	75
	References.....	77

Part II The Bitter Pit Investigation

7	Bitter Pit	81
7.1	History of Research into Bitter Pit.....	81
7.2	Bitter Pit in Australia	85
7.3	The Economic Importance of Apples	86
7.4	An Increasing Problem 1886–1910	87
7.5	A National Investigation Proposed	88
7.6	The Perth Conference	90
7.7	The Ministers Respond	90
7.8	The Reluctant Appointee	93
	References.....	93
8	The Poison Theory	97
8.1	Codlin Moth, Lead Arsenate and Bitter Pit	97
8.2	Delay, Uncertainty and Objection.....	99
8.3	<i>Penang</i> – Investigative Journalist.....	100
8.4	The Minister and the Poison Theory.....	103
8.5	Test Committee Fails Ewart and White	104
	References.....	105

9	A National Investigation	107
9.1	Government in Australia	107
9.2	Appointment of McAlpine	108
9.3	Commonwealth Advisory Committee on Bitter Pit	109
9.4	Travel, Distance and Time	110
	References	111
10	The First Year 1911–1912	113
10.1	Establishing Starting Points	113
10.2	The Australian Apple Industry 1900–1911	113
10.3	Advisory Committee's First Report	118
10.4	The First Year's Accounts	121
	References	121
11	Serious Stumbling Blocks	123
11.1	The Irony of Preparation	123
11.2	Ewart Corrupts Advisory Committee	123
11.3	Distribution of the First Progress Report	129
	References	131
12	The Second Year 1912–1913	133
12.1	The Second Progress Report	133
12.2	Monthly Reports	135
12.3	Long Distance Transport of Meat, Fruit and Vegetables	138
12.4	The Voyage of <i>SS Somerset</i>	140
12.5	The Advisory Committee's Second Report	141
	References	143
13	The Third Year 1913–1914	145
13.1	Monthly Reports	145
13.2	The Third Progress Report	150
	References	151
14	The Fourth Year of the Investigation 1914–1915	153
14.1	Royal Commission	153
14.2	The Fourth Progress Report	156
14.3	The Advisory Committee's Penultimate Report	157
14.4	McAlpine's Letter to the Premier	159
	References	160
15	Fifth Year of the Investigation 1915–1916	161
15.1	The Uncertainties of 1915–1916	161
15.2	Extension into a Fifth Year	163
15.3	The Final Advisory Committee Report	165
	References	166

16	Appraisal of McAlpine's Success	169
16.1	Physiological Disorders	169
16.2	Quantitative Evidence of Success	171
16.3	Qualitative Evidence – The National View	173
16.4	The Prophet in His Own Land	174
16.5	International Comment	176
	References	178
17	A Century Later	181
17.1	The Test of Time	181
17.2	Circling Around the Cause	182
	References	186
 Part III Twilight of a Career		
18	Personal Interactions	191
18.1	Alfred Ewart	191
18.2	Ewart's Antagonism to McAlpine	191
18.3	McAlpine and the Advisory Committee	198
	18.3.1 Divergent Objectives	199
	18.3.2 Knowledge of Mineral Nutrients	200
18.4	Daniel McAlpine and Charles Brittlebank	200
	References	203
19	The Fruitless Years	205
19.1	Termination and Withdrawal	205
19.2	Forgotten Gentleman's Agreement	205
19.3	Attempts to Continue Working – 1917	206
19.4	<i>Invercliffe</i> and Retreat into Retirement	212
19.5	The <i>Espiranto</i> Dictionary	214
19.6	Applied Evolution	214
	References	217
20	A Reputation Re-established	219
20.1	Rekindling Appreciation	219
20.2	The Australasian Plant Pathology Society	220
20.3	The Daniel McAlpine Memorial Lectures	222
20.4	The Daniel McAlpine Outstanding Achievement Award	223
20.5	The Daniel McAlpine Medal	223
20.6	Wide Influence and Many Talents	224
	References	225

Appendices..... 227

 Appendix 1..... 227

 Biographical Notes on Some Who Touched
 on or Who Influenced McAlpine’s Career..... 227

 Appendix 2..... 248

 Appendix 3..... 251

 Daniel McAlpine Memorial Lecturers..... 251

<http://www.springer.com/978-3-319-09551-6>

Daniel McAlpine and The Bitter Pit

Parbery, D.G.

2015, XXI, 252 p. 39 illus., 18 illus. in color., Hardcover

ISBN: 978-3-319-09551-6