

Appendices: Chapter II App. 1

Species	Family	Site	N	Max. Nectar Crop (µl)	SE	Sugar Conc. (%)	SE	Max. Sugar Crop (mg)	SE	Abundance (N)	SE	Abundance (%)	Reward rate (Sugar Crop*Abund.)	SE	Display Size (mm <sup>2</sup> )	SE	Functional Flower Shape	X	Y	Δ bg	Remarks
<i>Campanula rotundifolia</i>	Campanulaceae	BG	13	0.20	0.08	47.6	7.2	0.23	0.08	4.9	2.7	10.0	<b>2.25</b>	<b>0.84</b>			2	-9.2	-0.7	9.3	
<i>Dianthus deltooides</i>	Caryophyllaceae	BG	20	0.09	0.02	23.9	2.7	0.10	0.02	2.5	2.5	5.1	0.52	0.10			2	-8.8	-9.1	12.7	
<i>Knautia arvensis</i>	Dipsacaceae	BG	24	<b>1.39</b>	<b>0.47</b>	<b>59.8</b>	<b>3.1</b>	<b>1.77</b>	<b>0.59</b>	2.0	2.0	4.1	<b>7.20</b>	<b>2.42</b>			1	-7.1	-10.0	12.2	
<i>Lathyrus pratensis</i>	Fabaceae	BG	14	0.11	0.05	47.9	5.7	0.14	0.06	5.5	2.2	11.2	1.59	0.66			3	17.5	-12.1	21.5	
<i>Lathyrus sylvestris</i>	Fabaceae	BG	21	<b>1.22</b>	<b>0.17</b>	<b>57.0</b>	<b>2.9</b>	<b>1.51</b>	<b>0.21</b>	2.8	1.9	5.7	<b>8.63</b>	<b>1.20</b>			3	-9.0	5.5	10.5	
<i>Leontodon hispidus</i>	Asteraceae	BG	7	0.17	0.04	36.3	7.4	0.20	0.04	0.3	0.2	0.6	0.12	0.03			1	10.7	8.4	13.7	
<i>Leucanthemum ircutianum</i>	Asteraceae	BG	16	<i>0.06</i>	<i>0.01</i>	46.0	5.8	<i>0.07</i>	<i>0.02</i>	2.7	2.3	5.5	0.39	0.10			1	-3.5	-10.2	10.8	
<i>Ranunculus bulbosus</i>	Ranunculaceae	BG	19	<i>0.08</i>	<i>0.01</i>	<b>56.2</b>	<b>3.3</b>	0.16	0.03	2.7	2.3	5.5	0.85	0.19			1	12.6	9.3	15.7	
<i>Salvia pratensis</i>	Lamiaceae	BG	7	0.26	0.06	<b>64.3</b>	<b>0.9</b>	0.34	0.08	7.5	7.5	15.3	<b>5.16</b>	<b>1.21</b>			3	-10.7	-4.6	11.7	blue morph
<i>Salvia pratensis</i>	Lamiaceae	BG	11	<b>0.28</b>	<b>0.03</b>	<b>68.7</b>	<b>1.9</b>	<b>0.37</b>	<b>0.04</b>	0.4	0.4	0.8	0.30	0.03			3	-8.0	-6.5	10.4	white morph
<i>Trifolium repens</i>	Fabaceae	BG	13	0.11	0.02	46.3	8.3	0.13	0.03	3.8	1.8	7.7	1.00	0.20			2	-2.8	-8.6	9.1	
<i>Vicia sepium</i>	Fabaceae	BG	17	0.17	0.05	<b>56.5</b>	<b>6.0</b>	0.21	0.07	4.1	4.1	8.4	1.75	0.58			2	-5.8	-2.6	6.8	
<i>Euphorbia esula</i>	Euphorbiaceae	BG/LH	18	0.43	0.15	47.6	5.2	0.54	0.19	1.7	1.7	3.5	1.86	0.66	0.81	0.08	1	6.9	-0.4	7.0	
<i>Lychnis flos-cuculi</i>	Caryophyllaceae	BG/LH	7	0.12	0.05	64.2	5.1	0.16	0.06	0.7	0.7	1.4	0.23	0.08	<b>3.19</b>	<b>0.17</b>	2	-6.7	-2.5	7.2	
<i>Trifolium pratense</i> ssp. <i>pratense</i>	Fabaceae	BG/LH	14	0.29	0.06	22.9	4.8	0.30	0.07	7.5	5.3	15.3	<b>4.63</b>	<b>1.02</b>	<b>3.12</b>	<b>0.39</b>	2	-5.4	-5.5	7.8	
<i>Anthemis rutherica</i>	Asteraceae	LH													<b>3.35</b>	<b>0.31</b>		-3.6	-10.1	10.7	
<i>Capsella bursa-pastoris</i>	Brassicaceae	LH													<i>0.44</i>	<i>0.04</i>		-3.6	-5.6	6.7	
<i>Cardamine pratensis</i> s.str.	Brassicaceae	LH	24	0.15	0.02	33.5	3.6	0.17	0.02	0.6	0.6	2.8	0.48	0.07	1.06	0.07	1	-3.9	-8.8	9.6	
<i>Cerastium arvense</i>	Caryophyllaceae	LH	23	0.17	0.02	35.2	4.5	0.19	0.02	1.9	1.6	8.9	1.71	0.22	1.67	0.07	1	-4.3	-7.6	8.7	
<i>Erodium cicutarium</i>	Geraniaceae	LH	10	0.11	0.02	<b>49.9</b>	<b>7.3</b>	0.13	0.02	3.4	2.1	15.9	2.04	0.30	1.24	0.05	1	-11.0	3.9	11.7	
<i>Glechoma hederacea</i>	Lamiaceae	LH	23	<b>0.50</b>	<b>0.11</b>	36.2	3.4	<b>0.57</b>	<b>0.12</b>	1.4	1.4	6.5	3.75	0.78	0.50	0.03	2	-9.2	-6.2	11.1	
<i>Lamium purpureum</i>	Lamiaceae	LH	18	0.13	0.03	39.4	3.3	0.15	0.04	5.9	5.9	27.6	<b>4.04</b>	<b>1.07</b>			2	-3.8	-4.3	11.1	
<i>Matricaria discoidea</i>	Asteraceae	LH													<i>0.32</i>	<i>0.01</i>		3.6	-3.0	4.8	
<i>Medicago lupulina</i>	Fabaceae	LH													<i>0.02</i>	<i>0.00</i>		2.5	-0.5	2.6	
<i>Myosotis</i> spec.	Boraginaceae	LH													<i>0.02</i>	<i>0.00</i>		-5.6	-8.5	10.3	<i>M. ramosissima</i> and <i>stricta</i>

BG = Botanical Garden, LH = Lower Havelaue **in bold = significantly higher values**, *in italics = significantly lower values*  
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Species	Family	Site	N	Max. Nectar Crop (µl)	SE	Sugar Conc. (%)	SE	Max. Sugar Crop (mg)	SE	Abundance (N)	SE	Abundance (%)	Reward rate (Sugar Crop*Abund.)	SE	Display Size (mm <sup>2</sup> )	SE	Functional Flower Shape	X	Y	Δ bg	Remarks
<i>Ranunculus auricomus</i> agg.	Ranunculaceae	LH	26	0.06	0.01	28.8	2.4	0.07	0.01	0.4	0.3	1.9	0.14	0.02	<b>2.80</b>	<b>0.19</b>	1	11.3	9.4	12.7	
<i>Rhinanthus minor</i>	Scrophulariaceae	LH													0.36	0.01		7.7	-1.8	8.2	
<i>Saxifraga granulata</i>	Saxifragaceae	LH	24	<b>0.33</b>	<b>0.05</b>	32.8	2.9	<b>0.38</b>	<b>0.06</b>	1.6	1.1	7.5	<b>2.81</b>	<b>0.43</b>	0.73	0.05	1	-3.6	-8.8	9.5	
<i>Senecio vernalis</i>	Asteraceae	LH	24	0.23	0.03	36.7	4.3	0.26	0.03	0.4	0.4	1.9	0.48	0.06	<b>2.48</b>	<b>0.14</b>	1	6.9	9.3	11.6	
<i>Taraxacum officinale</i> agg.	Asteraceae	LH	24	<b>8.17</b>	<b>1.12</b>	30.7	3.1	<b>9.31</b>	<b>1.32</b>	2.1	1.3	9.8	<b>91.37</b>	<b>12.98</b>	<b>9.69</b>	<b>0.37</b>	1	6.7	8.1	10.6	
<i>Veronica spec.</i>	Scrophulariaceae	LH													0.22	0.01		?	?	?	
<i>Viola tricolor</i>	Violaceae	LH	18	0.11	0.02	40.4	4.8	0.13	0.02	0.5	0.5	2.3	0.30	0.06	<b>3.18</b>	<b>0.15</b>	2	-12.2	-6.4	13.8	violet morph
<i>Viola tricolor</i>	Violaceae	LH	23	0.10	0.01	<b>49.1</b>	<b>4.5</b>	0.12	0.02	3.2	3.2	15.0	1.85	0.27	1.60	0.18	2	-3.0	-6.4	12.5	yellow morph
<i>Acinus alpinus</i>	Lamiaceae	OB	27	0.13	0.02	24.2	3.2	0.15	0.03	3.2	1.7	4.4	0.64	0.12			2	-10.2	-4.5	11.2	
<i>Anthyllis vulneraria</i> ssp. <i>alpestris</i>	Fabaceae	OB	25	1.54	0.35	20.9	4.0	<b>1.66</b>	<b>0.38</b>	4.6	1.8	6.3	<b>10.47</b>	<b>2.38</b>			2	14.5	-6.8	16.2	
<i>Bartsia alpina</i>	Scrophulariaceae	OB	27	1.09	0.12	<b>42.7</b>	<b>1.4</b>	<b>1.29</b>	<b>0.14</b>	0.8	0.5	1.0	1.33	0.15			2	-7.3	1.2	7.5	
<i>Biscutella laevigata</i>	Brassicaceae	OB	13	0.60	0.19	24.9	3.2	0.67	0.21	0.4	0.3	0.5	0.32	0.10			1	6.2	-9.7	11.9	
<i>Gentiana brachyphylla</i>	Gentianaceae	OB	25	<b>1.80</b>	<b>0.22</b>	33.5	2.7	<b>2.06</b>	<b>0.24</b>	2.0	0.9	2.7	<b>5.64</b>	<b>0.66</b>			0	-10.8	-3.6	11.4	
<i>Gentiana clusii</i>	Gentianaceae	OB	21	<b>7.64</b>	<b>3.11</b>	42.0	4.7	<b>8.30</b>	<b>3.18</b>	0.2	0.1	0.2	1.71	0.65			2	-10.1	-5.5	11.6	
<i>Linaria alpina</i>	Scrophulariaceae	OB	23	0.10	0.02	28.1	5.4	0.11	0.02	0.9	0.6	1.2	0.13	0.02			3	-10.2	-4.0	11.0	
<i>Lloydia serotina</i>	Liliaceae	OB	6	0.34	0.10	42.1	8.9	0.39	0.11	0.0	0.0	0.0	0.03	0.01			1	-1.7	-7.0	7.3	
<i>Myosotis alpestris</i>	Boraginaceae	OB	18	0.15	0.03	18.3	3.8	0.16	0.03	1.1	0.352	1.4	0.24	0.05			2	-8.1	-8.4	11.7	
<i>Oxytropis campestris</i>	Fabaceae	OB	32	1.73	0.31	26.7	3.0	<b>1.91</b>	<b>0.34</b>	0.6	0.6	0.8	1.57	0.28			2	-3.6	-7.4	8.5	
<i>Primula minima</i>	Primulaceae	OB	22	0.26	0.04	40.1	5.1	0.30	0.05	4.6	4.0	6.2	1.86	0.29			2	-9.4	-6.3	11.4	
<i>Ranunculus alpestris</i>	Ranunculaceae	OB	4	0.13	0.03	42.6	7.4	0.15	0.04	5.6	2.7	7.7	1.14	0.29			1	-2.3	-9.4	9.7	
<i>Ranunculus montanus</i>	Ranunculaceae	OB	21	0.13	0.03	38.2	4.0	0.15	0.03	3.6	1.3	4.9	0.75	0.16			1	11.5	8.8	14.6	
<i>Silene exscapa</i>	Caryophyllaceae	OB	23	1.79	0.38	16.0	2.6	<b>1.86</b>	<b>0.38</b>	42.6	24.7	58.4	<b>108.71</b>	<b>21.86</b>			1	-6.5	-6.7	9.4	
<i>Silene vulgaris</i>	Caryophyllaceae	OB	13	1.52	0.33	36.2	4.2	<b>1.66</b>	<b>0.34</b>	1.7	0.7	2.3	3.75	0.76			3	-3.4	-7.2	8.0	
<i>Soldanella pusilla</i>	Primulaceae	OB	25	0.43	0.07	28.9	4.1	0.47	0.07	1.3	0.9	1.7	0.81	0.12			2	-7.6	-4.0	8.7	
<i>Thymus praecox</i>	Lamiaceae	OB	18	0.50	0.09	30.1	4.6	0.55	0.10	0.1	0.1	0.1	0.08	0.01			1	-7.5	-6.6	10.0	
<i>Trollius europaeus</i>	Ranunculaceae	OB	24	0.50	0.07	20.3	2.7	0.55	0.08	0.1	0.1	0.1	0.04	0.01			3	6.4	-2.7	7.0	

LH = Lower Havelaue, OB = Oberrassfeld      **in bold = significantly higher values**, *in italics = significantly lower values*  
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<i>Arnica montana</i>	Asteraceae	PM	17	<b>0.98</b>	<b>0.27</b>	51.2	4.5	<b>2.88</b>	<b>0.99</b>	0.3	0.3	0.8	2.33	0.80			1	7.8	7.9	11.2	
<i>Campanula barbata</i>	Campanulaceae	PM	9	<b>1.90</b>	<b>0.82</b>	42.8	4.9	<b>2.18</b>	<b>0.90</b>	0.1	0.1	0.2	0.44	0.18			2	-7.4	-3.4	8.3	
<i>Campanula scheuchzeri</i>	Campanulaceae	PM	19	<b>0.99</b>	<b>0.16</b>	45.7	4.2	<b>1.20</b>	<b>0.19</b>	2.5	1.2	6.1	<b>7.28</b>	<b>1.14</b>			2	-10.1	-2.0	10.4	
<i>Carduus crassifolius</i>	Asteraceae	PM	10	<b>15.88</b>	<b>5.24</b>	52.9	4.9	<b>18.90</b>	<b>6.17</b>	0.6	0.6	1.4	<b>26.77</b>	<b>8.75</b>			1	-7.2	-5.7	9.4	
<i>Crepis conyzifolia</i>	Asteraceae	PM	20	<b>1.04</b>	<b>0.22</b>	39.6	6.5	<b>1.24</b>	<b>0.28</b>	0.9	0.4	2.2	2.77	0.62			1	8.3	7.4	11.2	
<i>Hieracium hoppeanum</i>	Asteraceae	PM	5	<b>1.31</b>	<b>0.35</b>	45.7	6.6	<b>1.56</b>	<b>0.44</b>	0.2	0.2	0.4	0.63	0.18			1	9.3	-6.4	11.4	
<i>Lathyrus pratensis</i>	Fabaceae	PM	18	0.18	0.03	31.7	3.3	0.21	0.04	7.5	6.8	18.2	<b>3.77</b>	<b>0.66</b>			3	8.9	-2.0	9.3	
<i>Phyteuma persicifolium</i>	Campanulaceae	PM	17	0.42	0.11	<b>53.3</b>	<b>4.3</b>	0.51	0.13	0.2	0.1	0.4	<i>0.21</i>	<i>0.05</i>			1	-8.9	-2.2	9.2	
<i>Potentilla erecta</i>	Rosaceae	PM	3	0.10	0.05	3.9	0.8	0.10	0.05	5.6	1.5	13.6	1.31	0.70			1	9.0	9.0	12.7	
<i>Prunella grandiflora</i>	Lamiaceae	PM	25	<b>0.81</b>	<b>0.11</b>	37.7	2.6	<b>0.95</b>	<b>0.12</b>	7.8	7.8	19.0	<b>18.00</b>	<b>2.36</b>			2	-10.7	-4.3	11.6	
<i>Rhinanthus glacialis</i>	Scrophulariaceae	PM	22	0.25	0.03	31.3	3.4	0.28	0.03	8.2	8.2	19.8	<b>5.63</b>	<b>0.62</b>			3	15.5	-8.0	17.6	
<i>Scabiosa lucida</i>	Dipsacaceae	PM	13	<b>2.03</b>	<b>0.98</b>	48.6	6.5	<b>2.46</b>	<b>1.18</b>	1.1	0.3	2.6	<b>6.46</b>	<b>3.11</b>			1	-7.2	-10.9	13.1	
<i>Solidago virgaurea</i> ssp. <i>minuta</i>	Asteraceae	PM	10	<b>1.20</b>	<b>0.33</b>	34.3	6.7	<b>1.42</b>	<b>0.37</b>	2.0	2.0	4.9	<b>6.91</b>	<b>1.81</b>			1	6.9	5.5	8.9	
<i>Trifolium montanum</i>	Fabaceae	PM	13	<i>0.08</i>	<i>0.05</i>	89.2	43.1	<i>0.11</i>	<i>0.06</i>	0.8	0.7	2.0	<i>0.22</i>	<i>0.12</i>			2	-2.6	-7.9	8.5	
<i>Trifolium pratense</i> ssp. <i>nivale</i>	Fabaceae	PM	17	<i>0.08</i>	<i>0.03</i>	37.1	7.5	<i>0.10</i>	<i>0.03</i>	0.4	0.3	1.0	<i>0.11</i>	<i>0.04</i>			2	-4.0	-6.1	7.5	pink morph
<i>Valeriana officinalis</i> s.l.	Valerianaceae	PM	10	0.25	0.08	35.7	6.9	0.29	0.09	0.3	0.3	0.8	0.26	0.08			1	-4.9	-7.3	8.8	
<i>Vicia cracca</i>	Fabaceae	PM	13	<i>0.05</i>	<i>0.01</i>	<b>56.1</b>	<b>5.6</b>	<i>0.06</i>	<i>0.01</i>	2.7	2.7	6.5	0.37	0.08			2	-8.3	-3.7	9.2	

PM = Pockhorner Meadows      **in bold = significantly higher values**, *in italics = significantly lower values*  
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