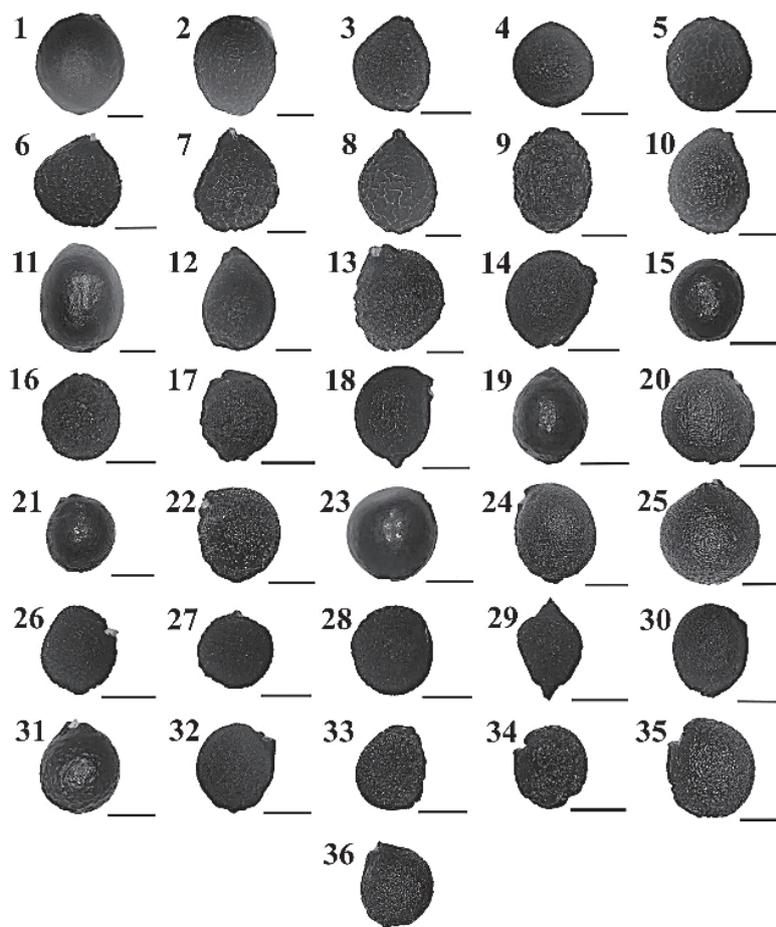


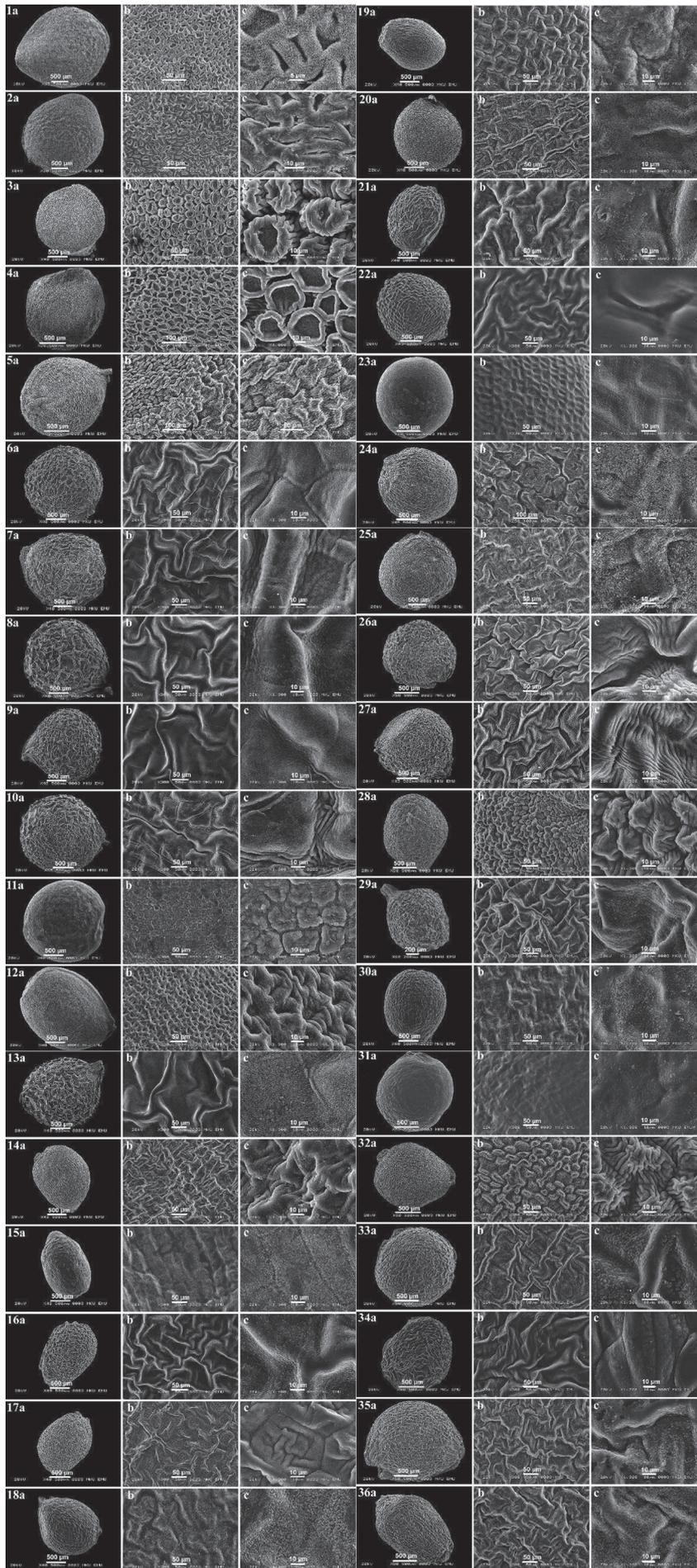
## ON-LINE SUPPLEMENTAL MATERIAL

On-line Suppl. Tab. 1. The dissimilarity matrix of the examined taxa.

Taxa	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
<i>M. macrocarpum</i> (1)	0																																						
<i>M. racemosum</i> (2)	5.78	0																																					
<i>M. caucasicum</i> (3)	45.84	51.35	0																																				
<i>M. weissii</i> (4)	13.47	8.21	58.79	0																																			
<i>M. comosum</i> (5)	21.62	16.37	67.08	9.18	0																																		
<i>M. tenuiflorum</i> (6)	56.89	62.43	11.80	69.68	78.98	0																																	
<i>M. babachii</i> (7)	61.41	66.94	16.08	74.88	82.78	4.34	0																																
<i>M. erdalii</i> (8)	19.63	14.23	65.18	7.59	4.26	76.03	80.94	0																															
<i>M. longipes</i> (9)	68.79	74.31	23.36	81.43	90.88	12.07	8.03	88.12	0																														
<i>M. massayanum</i> (10)	9.66	15.06	36.79	22.51	30.28	47.02	52.78	28.78	59.67	0																													
<i>M. mirum</i> (11)	48.89	54.35	5.08	61.50	70.20	8.25	12.19	68.29	20.25	39.75	0																												
<i>M. elmasi</i> (12)	15.85	10.38	61.40	4.91	7.072	72.50	76.92	5.15	84.39	24.36	64.42	0																											
<i>M. ufukii</i> (13)	25.83	31.38	20.39	38.17	47.49	31.72	35.91	45.03	43.77	16.51	23.93	41.62	0																										
<i>M. coeleste</i> (14)	26.39	20.92	71.92	13.97	6.058	83.58	87.76	7.12	94.79	35.31	75.34	11.28	51.88	0																									
<i>M. azureum</i> (15)	20.36	15.11	65.74	7.39	3.23	76.98	81.18	4.46	88.95	29.38	68.91	6.42	45.74	7.71	0																								
<i>M. aucheri</i> (16)	21.33	16.03	66.78	8.03	3.21	77.26	82.44	3.31	89.42	30.29	69.92	6.65	46.82	5.97	3.67	0																							
<i>M. armeniacum</i> (17)	11.90	17.31	34.69	24.04	32.25	45.04	50.08	31.96	57.43	4.55	37.12	27.25	14.81	37.71	31.52	32.04	0																						
<i>M. sivrithisardaghlaensis</i> (18)	22.48	16.74	67.04	9.76	3.39	78.822	83.29	3.18	90.54	31.81	70.98	7.25	47.58	4.86	4.62	2.32	33.56	0																					
<i>M. neglectum</i> (19)	18.40	13.11	63.26	5.52	4.45	74.99	79.98	4.20	86.66	27.35	66.68	4.81	43.39	8.81	3.73	4.42	29.05	5.49	0																				
<i>M. anatolicum</i> (20)	36.80	31.38	82.52	23.83	15.28	93.65	98.84	17.56	105.05	45.24	85.47	21.28	62.32	10.85	17.40	15.77	48.66	14.94	18.63	0																			
<i>M. tuzgoluensis</i> (21)	11.93	7.08	57.43	3.28	10.33	68.52	72.72	8.43	80.63	20.76	60.53	5.75	37.03	14.50	9.01	9.87	23.43	10.29	7.64	25.33	0																		
<i>M. discolor</i> (22)	41.51	36.08	87.22	28.29	20.91	98.48	102.65	22.52	110.87	50.14	90.17	26.09	67.03	15.76	21.37	20.78	52.32	19.35	23.81	5.37	30.05	0																	
<i>M. inconstriatum</i> (23)	37.77	32.29	83.69	24.62	16.95	94.95	99.14	18.75	106.82	46.96	86.54	22.55	63.25	12.87	18.94	17.77	49.32	16.99	19.75	3.18	26.08	4.27	0																
<i>M. latifolium</i> (24)	7.37	12.53	39.17	19.75	27.81	50.89	55.88	25.94	62.74	3.74	42.94	22.79	19.03	32.11	26.18	27.55	5.72	28.18	24.08	43.53	17.68	47.04	44.49	0															
<i>M. adillii</i> (25)	28.27	23.31	74.72	15.32	8.05	85.79	89.97	9.44	97.06	37.08	77.61	13.24	54.22	3.62	9.87	7.12	40.13	6.17	11.68	8.35	17.35	12.66	9.75	35.52	0														
<i>M. bourgaei</i> (26)	5.81	10.85	41.55	17.66	26.52	52.63	56.84	24.56	64.25	5.82	44.92	20.59	21.31	30.92	24.36	25.62	7.56	26.37	22.78	41.43	15.64	45.18	42.66	2.67	33.51	0													
<i>M. sandrasicum</i> (27)	125.44	126.02	129.96	127.55	129.67	134.16	134.47	128.77	137.31	124.37	130.39	127.4	125.57	130.14	128.31	128.27	124.90	129.41	128.45	133.78	126.23	135.63	134.79	124.13	131.76	124.22	0												
<i>M. microstomum</i> (28)	10.63	16.27	35.661	23.51	31.31	46.14	51.39	29.39	58.87	3.91	38.48	26.35	15.04	36.13	30.78	31.67	3.74	32.97	28.39	46.97	21.11	51.88	48.66	5.08	38.36	6.83	124.46	0											
<i>M. maceathianum</i> (29)	19.07	13.79	64.58	6.694	4.41	75.72	80.91	3.24	87.73	27.21	67.72	5.37	44.47	7.63	4.25	3.99	30.34	4.11	3.72	18.26	7.36	22.11	19.87	25.06	10.02	23.22	128.28	29.08	0										
<i>M. vuralii</i> (30)	15.32	10.19	60.13	4.059	7.03	71.24	76.43	5.94	83.37	24.34	63.21	4.85	40.75	11.61	6.25	6.49	26.96	7.436	5.19	21.95	3.22	26.64	23.96	21.36	13.17	19.55	127.32	25.41	4.29	0									
<i>M. parviflorum</i> (31)	41.81	36.36	87.36	28.84	20.97	98.74	103.93	22.33	110.05	50.23	90.56	26.08	67.17	15.73	21.93	20.34	53.32	19.889	23.44	5.39	30.83	1.01	5.08	48.05	13.91	46.13	135.81	51.87	23.17	26.38	0								
<i>M. serpentinicum</i> (32)	20.32	15.01	65.82	7.61	2.58	76.25	81.47	3.09	88.02	29.58	68.18	5.63	45.73	6.29	3.06	3.04	31.83	3.72	4.12	16.24	9.12	21.07	18.48	26.59	9.26	24.34	128.26	30.17	3.98	6.46	21.58	0							
<i>M. botryoides</i> (33)	34.16	28.70	79.02	21.38	13.94	90.63	95.61	14.03	102.88	43.15	82.27	18.76	59.0	8.17	14.41	13.85	45.25	12.165	16.39	3.17	22.56	7.79	5.14	40.11	5.92	38.41	132.19	44.95	15.14	19.38	7.91	14.12	0						
<i>M. artvinense</i> (34)	57.32	63.35	12.92	70.44	79.03	3.86	5.69	77.57	11.96	48.47	9.33	73.15	32.01	83.83	77.94	78.59	46.66	79.647	75.03	94.97	69.81	99.92	95.79	51.15	86.26	53.75	133.19	47.86	76.97	72.43	99.16	77.07	91.88	0					
<i>M. atillae</i> (35)	22.86	28.21	23.71	35.49	43.66	34.76	39.94	41.83	46.25	13.92	26.62	38.46	3.97	48.13	42.78	43.57	11.81	44.407	40.94	59.44	33.62	63.19	60.24	16.96	51.41	17.69	125.94	12.03	41.09	37.45	64.27	42.71	56.37	35.76	0				
<i>M. turcicum</i> (36)	43.28	37.81	88.88	30.24	22.78	10.26	104.45	23.25	111.55	52.89	91.88	27.44	68.78	17.04	23.55	22.14	54.89	21.371	25.12	6.09	31.55	2.23	6.13	49.69	14.71	47.73	136.31	53.44	24.34	28.12	2.047	23.38	9.92	100.85	65.85	0			



**On-line Suppl. Fig. 1.** Seeds of the studied taxa: 1- *M. macrocarpum* (orbicular), 2- *M. racemosum* (ovate-orbicular), 3- *M. caucasicum* (ovate), 4- *M. weissii* (orbicular), 5- *M. comosum* (orbicular), 6- *M. tenuiflorum* (ovate-orbicular), 7- *M. babachii* (ovate), 8- *M. erdalii* (ovate), 9- *M. longipes* (oblong-elliptic), 10- *M. massayanum* (ovate), 11- *M. mirum* (oblong-ovate), 12- *M. elmasii* (ovate), 13- *M. ufukii* (ovate), 14- *M. coeleste* (orbicular), 15- *M. azureum* (orbicular), 16- *M. aucheri* (orbicular), 17- *M. armeniacum* (ovate-orbicular), 18- *M. sivrihisardaghlarensis* (ovate-orbicular), 19- *M. neglectum* (elliptic), 20- *M. anaticum* (orbicular), 21- *M. tuzgoluensis* (orbicular), 22- *M. discolor* (orbicular), 23- *M. inconstictum* (orbicular), 24- *M. latifolium* (ovate-orbicular), 25- *M. adilii* (orbicular), 26- *M. bourgaei* (orbicular), 27- *M. sandrasicum* (orbicular), 28- *M. microstomum* (orbicular), 29- *M. macbeathianum* (elliptic-lanceolate), 30- *M. vuralii* (orbicular), 31- *M. parviflorum* (orbicular), 32- *M. serpentanicum* (orbicular), 33- *M. botryoides* (ovate), 34- *M. artvinense* (orbicular), 35- *M. atillae* (orbicular), 36- *M. turcicum* (orbicular) (scale bars = 1 mm).

**On-line Suppl. Fig. 2.**

The micromorphological structures of the studied taxa.

**a**= seed general view,

**b and c**=seed surfaces

**1a-c:** *M. macrocarpum* (reticulate),

**2a-c:** *M. racemosum* (reticulate),

**3a-c:** *M. caucasicum* (alveolate),

**4a-c:** *M. weissii* (alveolate),

**5a-c:** *M. comosum* (verrucate),

**6a-c:** *M. tenuiflorum* (reticulate-areolate),

**7a-c:** *M. babachii* (reticulate-areolate),

**8a-c:** *M. erdalii* (ruminante),

**9a-c:** *M. longipes* (ruminante),

**10a-c:** *M. massayanum* (ruminante),

**11a-c:** *M. mirum* (reticulate-areolate),

**12a-c:** *M. elmasii* (reticulate-foveate),

**13a-c:** *M. ufukii* (ruminante),

**14a-c:** *M. celeste* (ruminante),

**15a-c:** *M. azureum* (scalariform),

**16a-c:** *M. aucheri* (ruminante),

**17a-c:** *M. armeniacum* (reticulate-areolate),

**18a-c:** *M. sivrihisardaghlarensis* (rugose),

**19a-c:** *M. neglectum* (areolate),

**20a-c:** *M. anatolicum* (rugose),

**21a-c:** *M. tuzgoluensis* (ruminante),

**22a-c:** *M. discolor* (ruminante),

**23a-c:** *M. inconstictum* (reticulate),

**24a-c:** *M. latifolium* (ruminante),

**25a-c:** *M. adilii* (ruminante),

**26a-c:** *M. bourgaei* (ruminante),

**27a-c:** *M. sandasicum* (ruminante),

**28a-c:** *M. microstomum* (verrucate),

**29a-c:** *M. macbeathianum* (ruminante),

**30a-c:** *M. vuralii* (ruminante),

**31a-c:** *M. parviflorum* (ruminante),

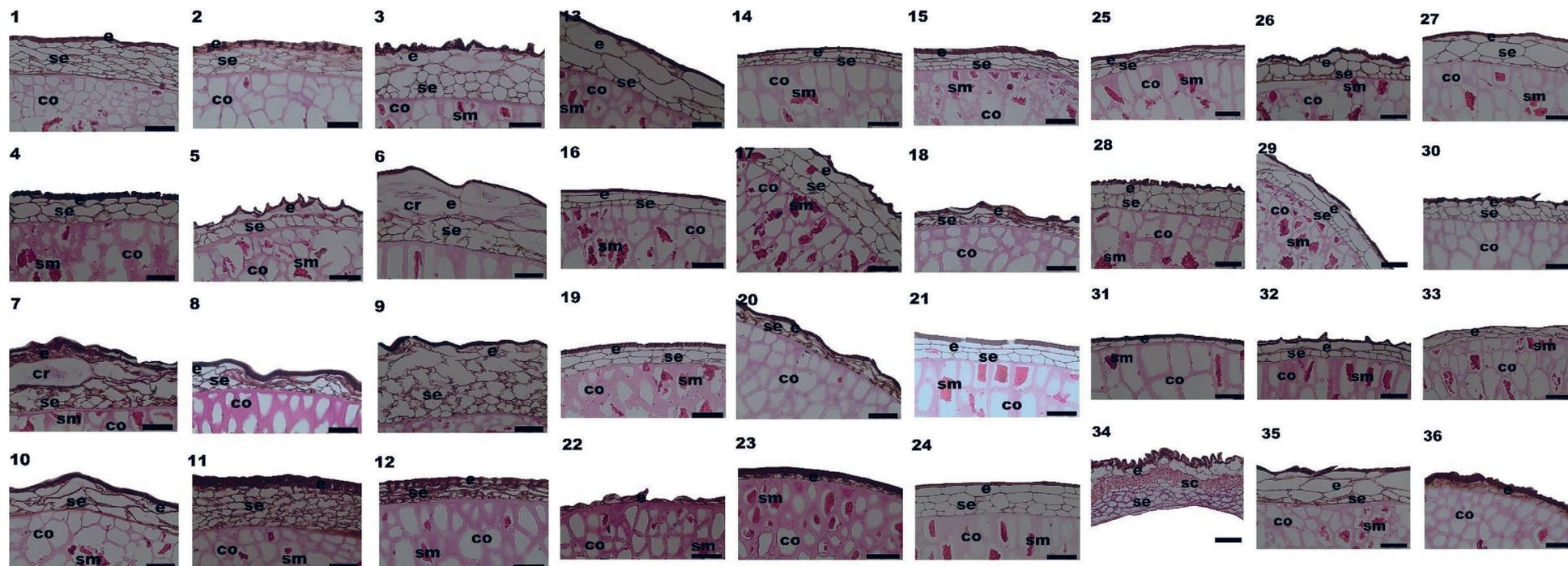
**32a-c:** *M. serpentanicum* (verrucate),

**33a-c:** *M. botryoides* (rugose),

**34a-c:** *M. artvinense* (rugose),

**35a-c:** *M. atillae* (ruminante),

**36a-c:** *M. turcicum* (ruminante)



**On-line Suppl. Fig. 3.** The testa structures of the studied taxa: 1- *M. macrocarpum*, 2- *M. racemosum*, 3- *M. caucasicum*, 4- *M. weissii*, 5- *M. comosum*, 6- *M. tenuiflorum*, 7- *M. babachii*, 8- *M. erdalii*, 9- *M. longipes*, 10- *M. massayanum*, 11- *M. mirum*, 12- *M. elmasii*, 13- *M. ufukii*, 14- *M. coeleste*, 15- *M. azureum*, 16- *M. aucheri*, 17- *M. armeniacum*, 18- *M. sivrihisardaghlarensis*, 19- *M. neglectum*, 20- *M. anatolicum*, 21- *M. tuzgoluensis*, 22- *M. discolor*, 23- *M. inconstictum*, 24- *M. latifolium*, 25- *M. adilii*, 26- *M. bourgaei*, 27- *M. sandrasicum*, 28- *M. microstomum*, 29- *M. macbeathianum*, 30- *M. vuralii*, 31- *M. parviflorum*, 32- *M. serpentanicum*, 33- *M. botryoides*, 34- *M. artvinense*, 35- *M. atillae*, 36- *M. turcicum* (e: epidermis, se: subepidermis, cr: crystals, co: cotyledon, sm: storage material, scale bars = 50  $\mu$ m).