Supplementary materials for
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Bryophyte vegetation of Bashkiria, South Urals. V. On the bryophyte communities of the Southern Kraka mountain range

Arctoa 33: …

Table 1. The communities of the class ***Ctenidietea mollusci*** von Hübschmann ex Grgič 1980:

***Tortella tortuosa*** – community (1–5), ***Campylium chrysophyllum*** – community (6-10)

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | **C****O****N****S****T****A****N****C****Y** | 6 | 7 | 8 | 9 | 10 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 47 | 50 | 80 | 41 | 40 | 44 | 43 | 45 | 46 | 8/1 |
| Length of the plot, cm | 40 | 15 | 60 | 20 | 60 | 50 | 30 | 49 | 100 | 15 |
| With of the plot, cm | 20 | 15 | 30 | 20 | 25 | 10 | 30 | 25 | 100 | 15 |
| Cover (%) | 40 | 70 | 65 | 80 | 80 | 80 | 45 | 40 | 25 | 80 |
| Substrate | ST | ST | ST | ST | ST | ST | ST | ST | ST | ST |
| Locality number | 6 | 6 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Number of species | 5 | 5 | 7 | 8 | 6 | 7 | 4 | 5 | 4 | 5 |
| D.s. of communities: |
| *Tortella tortuosa* | 2 | 3 | 2 | 2 | 4 | **100** | . | . | r | . | 1 | **40** |
| *Campylium chrysophyllum* | . | r | . | 2 | r | **60** | 3 | 3 | 3 | 2 | 3 | **100** |
| D.s. of the class ***Ctenidietalia mollusci*** |
| *Mesoptychia heterocolpos* | . | . | . | 3 | 2 | 40 | 1 | . | . | . | . | **20** |
| D.s. of the class ***Frullanio dilatatae-Leucodontetea sciuroidis*** |
| *Radula complanata* | r | 2 | . | + | . | 60 | . | . | . | . | . |  |
| Other species: |
| *Sanionia uncinata* | 1 | . | r | 2 | + | **80** | . | . | . | . | . |  |
| *Schistidium* cf. *flexipile* | 2 | . | . | . | . | **20** | . | . | . | . | . |  |
| *Eurhynchium pulchellum* | . | 1 | 2 | . | . | **40** | . | . | . | . | . |  |
| *Brachythecium albicans* | . | + | 2 | . | . | **40** | . | . | . | . | . |  |
| *Dicranum brevifolium* | . | . | + | . | . | **20** | . | . | . | . | . |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Number of relevé | 1 | 2 | 3 | 4 | 5 |  | 6 | 7 | 8 | 9 | 10 |  |
| *Pohlia cruda* | . | . | . | 1 | . | **20** | 1 | . | . | . | . | **20** |
| *Abietinella abietina* | . | . | . | 1 | . | **20** | . | . | . | . | + | **20** |
| *Bryum capillare* | . | . | . | r | r | **40** | . | 2 | . | . | + | **40** |
| *Cladonia pyxidata* | r | . | . | . | + | **40** | . | . | + | + | . | **40** |
| *Cladonia fimbriata* | . | . | + | . | . | **20** | . | . | . | . | . |  |
| *Ceratodon purpureus* | . | . | + | . | . | **20** | . | . | . | . | . |  |
| *Distichium capillaceum* | . | . | . | . | . |  | + | 2 | . | + | 1 | **80** |
| *Lepraria finkii* | . | . | . | . | . |  | + | . | . | . | . | **20** |
| *Mycobilimbia tetramera* | . | . | . | . | . |  | + | . | . | . | . | **20** |
| *Schistidium submuticum* | . | . | . | . | . |  | . | . | 2 | . | . | **20** |
| *Lophocolea minor* | . | . | . | . | . |  | . | . | 1 | . | . | **20** |
| *Bryum sp.* | . | . | . | . | . |  | . | + | . | + | . | **40** |
| *Hylocomium splendens* | . | . | . | . | . |  | r | . | . | . | . | **20** |

The locality number corresponds to that mentioned in the caption under Figure 1 in the text of the article.

Table 2. Association ***Grimmietum longirostris*** Nörr 1969

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 64 | 58 | 91 | 139 | 133 |
| Length of the plot, cm | 90 | 100 | 30 | 135 | 100 |
| With of the plot, cm | 50 | 100 | 15 | 60 | 100 |
| Cover moss layer (%) | 60 | 35 | 15 | 80 | 50 |
| Substrate | ST | ST | ST | ST | ST |
| Locality number | 7 | 7 | 12 | 14 | 14 |
| Number of species |  6 |  6 |  6 |  5 |  7 |
| D.s. of association |
| *Grimmia longirostris* | 2 | 2 | 2 | 4 | 3 | **100** |
| D.s. of the class ***Racomitrietea heterostichi*** and the order ***Grimmietalia commutatae***  |
| *Hedwigia mollis* | . | + | + | 1 | 2 | **80** |
| *Lewinskya rupestris* | . | . | . | . | + | **20** |
| Other species: |
| *Parmelia sulcata*  | . | r | + | . | . | **40** |
| *Paraleucobryum longifolium* | 2 | . | + | . | . | **40** |
| *Platygyrium repens* | 1 | r | . | . | . | **40** |
| *Cynodontium strumiferum* | + | 1 | . | . | . | **40** |
| *Radula complanata* | r | . | . | . | . | **20** |
| *Cladonia rangiformis* | + | . | . | . | . | **20** |
| *Tortella tortuosa* | . | 1 | . | . | . | **20** |
| *Bryum argenteum* | . | . | . | . | 1 | **20** |
| *Cladonia pocillum*  | . | . | . | + | . | **20** |
| *Hypogymnia physodes* | . | . | + | . | . | **20** |
| *Cladonia chlorophaea* | . | . | + | . | . | **20** |
| Number of relevé | 1 | 2 | 3 | 4 | 5 |  |
| *Xanthoparmelia stenophylla*  | . | . | . | r | 1 | **40** |
| *Physconia muscigena* | . | . | . | r | . | **20** |
| *Physcia caesia* | . | . | . | . | + | **20** |
| *Phaeophyscia constipata* | . | . | . | . | + | **20** |

The locality numbers of the relevés 1–3 correspond to those mentioned in the caption under Figure 1 in the text of the article. The locality of the relevés 5–6 is provided in the Material and Methods section.

Table 3. ***Hedwigia mollis*** – community

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 59 | 63 | 86 | 62 | 65 | 90 | 61 | 60 | 93 | 81 | 48 | 49 |
| Length of the plot, cm | 30 | 70 | 35 | 120 | 40 | 75 | 50 | 60 | 80 | 60 | 45 | 20 |
| With of the plot, cm | 30 | 50 | 20 | 60 | 40 | 35 | 20 | 35 | 80 | 30 | 20 | 15 |
| Cover moss layer (%) | 45 | 40 | 60 | 55 | 80 | 65 | 50 | 55 | 90 | 50 | 65 | 75 |
| Substrate | ST | ST | ST  | ST  | ST | ST | ST | ST | ST | ST | ST | ST |
| Locality number | 7 | 7 | 11 | 7 | 7 | 12 | 7 | 7 | 12 | 10 | 6 | 6 |
| Number of species | 10 | 6 | 5 | 7 | 5 | 8 | 7 | 7 | 5 | 5 | 6 | 5 |
| D.s. of community |
| *Hedwigia mollis* | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | **100** |
| D.s. of the class ***Frullanio dilatatae-Leucodontetea sciuroidis*** and the order ***Orthotrichetalia*** |
| *Leucodon sciuroides* | 1 | 2 | 2 | . | . | . | . | . | . |  . | .  | .  | **25** |
| *Radula complanata* | . | . | . | . | r | 1 | . | . | . |   | + | 2 | **17** |
| D.s. of the order ***Brachythecietalia*** |
| *Bryum moravicum* | . | . | 1 | . | . | 2 | . | . | . |  . | r |  . | **25** |
| *Brachytecium capillaceum* | . | . | . | + | . | 2 | . | . | . | .  |  . | .  | **17** |
| *Sciuro-hypnum reflexum* | . | . | . | . | . | r | . | . | . |  . |  . |  . | **8** |
| D.s. of the class ***Ctenidietea mollusci*** |
| *Tortella tortuosa* | . | . | 1 | . | . | . | . | r | . | 2 | .  | .  | **25** |
| Other species: |
| *Paraleucobryum longifolium* | . | . | . | 2 | 3 | 2 | 2 | + | 4 | .  |  . |  . | **50** |
| *Pseudoleskeella rupestris* | .  | .  | .  | .  | .  | .  | .  | .  | .  | 2 | 3 | 2 | **25** |
| *Grimmia longirostris* | 1 | . | . | r | . | . | . | . | + |  . | .  | .  | **25** |
| *Abietinella abietina* | . | 2 | . | 2 | + | . | . | . | . | . | 2 | + | **42** |
| *Cynodontium strumiferum* | . | . | . | . | r | . | 3 | 2 | . |  . | .  | .  | **25** |
| *Cladonia pyxidata*  | . | + | . | . | . | . | + | + | . | + |   |   | **33** |
| *Cladonia rangiformis*  | + | . | . | + | . | . | + | . | . | .  | .  | .  | **25** |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| *Hypogymnia physodes*  | + | . | . | . | . | . | + | + | + | . | . | . | **33** |
| *Cladonia chlorophaea*  | + | . | . | . | . | . | . | . | + | . | . | . | **17** |
| *Parmelia sulcata*  | + | . | . | . | . | . | . | . | . | . | . | . | **8** |
| *Xanthoparmelia stenophylla*  | + | . | . | . | . | . | . | . | . | . | . | . | **8** |
| *Evernia mesomorpha*  | + | . | . | . | . | . | . | . | . | . | . | . | **8** |
| *Cladonia pocillum*  | + | . | . | . | . | . | . | . | . | . | . | . | **8** |
| *Hypnum cupressiforme* | . | . | 2 | . | . | . | . | . | . | . | . | . | **8** |
| *Ceratodon purpureus* | . | + | . | . | . | . | . | . | . | . | . | . | **8** |
| *Sedum hybridum* | . | + | . | r | . | . | . | . | . | . | . | . | **17** |
| *Schistidium pulchrum* | . | . | . | . | . | . | . | . | . | . | + | 3 | **17** |
| *Parmelia omphalodes*  | . | . | . | . | . | . | . | + | . | . | . | . | **8** |
| *Cladonia coccifera*  | . | . | . | . | . | . | + | . | . | . | . | . | **8** |
| *Pseudoleskeella nervosa* | . | . | . | . | . | + | . | . | . | . | . | . | **8** |
| *Sanionia uncinata* | . | . | . | . | . | r | . | . | . | . | . | . | **8** |
| *Eurhynchium pulchellum* | . | . | . | . | . | . | . | . | . | + | . | . | **8** |

The locality number corresponds to that mentioned in the caption under Figure 1 in the text of the article.

Table 4. Association ***Pohlietum crudae*** Privitera & Puglisi 1997

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 24 | 28 | 31 | 29 | 34 |
| Length of the plot, cm | 15 | 15 | 30 | 30 | 70 |
| With of the plot, cm | 15 | 15 | 10 | 10 | 40 |
| Cover (%) | 90 | 85 | 90 | 85 | 85 |
| Substrate | SL | SL | SL | SL | SL |
| Locality number | 3 | 3 | 3 | 3 | 3 |
| Number of species | 6 | 5 | 7 | 4 | 11 |
| D.s. of association |
| *Pohlia cruda* | 4 | 3 | 3 | 2 | 2 | **100** |
| D.s. of the class ***Cladonio digitatae-Lepidozietea reptantis*** and the order ***Diplophylletalia*** with alliances |
| *Oxyrrhynchium hians* | 3 | 2 | . | . | . | **40** |
| *Plagiothecium denticulatum* | . | 3 | r | r | . | **60** |
| *Dicranella heteromalla* | 1 | . | . | . | . | **20** |
| *Polytrichum juniperinum* | r | . | . | . | . | **20** |
| *Plagiochila porelloides* | . | . | 3 | . | r | **40** |
| *Isopterygiopsis pulchella* | . | . | . | 2 | . | **20** |
| *Plagiothecium rossicum* | . | . | . | . | 1 | **20** |
| D.s. of the class ***Neckeretea complanatae*** and the order ***Neckerion complanatae*** |
| *Mnium marginatum* | . | . | 2 | . | r | **40** |
| *Oxystegus tenuirostris* | . | . | r | . | 1 | **40** |
| *Neckera pennata* | . | . | . | . | 2 | **20** |
| *Homalia trichomanoides* | . | . | . | . | 1 | **20** |
| Pseudoamblystegium subtile | . | . | . | . | r | **20** |
|  |
| Number of relevé | 1 | 2 | 3 | 4 | 5 |  |
| *Plagiomnium cuspidatum* | 1 | . | . | . | r | **40** |
| Other species |
| *Distichium capillaceum* | . | . | 2 | . | 2 | **40** |
| *Hylocomium splendens* | r | 2 | . | . | . | **40** |
| *Pleurozium schreberi* | . | 1 | . | . | . | **20** |
| *Rhodobryum roseum* | . | . | r | . | . | **20** |
| *Radula complanata* | . | . | . | 1 | . | **20** |
| *Saelania glaucescens* | . | . | . | . | r | **20** |

The locality number corresponds to that mentioned in the caption under Figure 1 in the text of the article.

Table 5. Association ***Brachythecietum salebroso–reflexi*** Pisarenko 1999

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of relevé |  1 | 2 | 3 | 4  | 5 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 101 | 23 | 17/1 | 17/2 | 51 |
| Length of the plot, cm | 40 | 15 | 15 | 10 | 15 |
| With of the plot, cm | 15 | 10 | 15 | 10 | 15 |
| Cover (%) | 90 | 90 | 100 | 100 | 100 |
| Base of tree (B)/Trunk (T) |   |   |   | B |   |
| Substrate | R | R | R | TC | ST |
| Locality number | 12 | 2 | 12 | 12 | 6 |
| Number of species | 8  | 12  |  4 | 9  | 4  |
| D.s. of association |
| *Sciuro-hypnum reflexum* | 2 | 3 | 5 | 4 | 5 | **100** |
| *Brachythecium salebrosum* | +. | 1 | 2 | 1 | 2 | **100** |
| D.s.of the class ***Cladonio digitatae-Lepidozietea reptantis*** and the order ***Lophocoleetalia***  |
| *Lophocolea heterophylla* | 2 | . | . | . | . | **20** |
| *Campylium sommerfeltii* | . | . | . | r | . | **20** |
| D.s. of the order ***Brachythecietalia rutabulo–salebrosi*** and the alliance ***Bryo capillaris–Brachythecion rutabili*** |
| *Amblystegium serpens* | . | r | . | 2 | . | **40** |
| *Sciuro-hypnum starkei* | . | r | . | . | . | **20** |
| D.s. ofthe alliance ***Dicrano scoparii-Hypnion filiformis*** |
| *Dicranum scoparium* | + | . | . | 2 | 1 | **60** |
| *Jochenia pallescens* | . | 1 | + | . | . | **40** |
| *Dicranum montanum* | . | 1 | . | . | . | **20** |
| *Callicladium haldanianum* | r | . | . | . | . | **20** |
| Other species: |
| *Sanionia uncinata* | 1 | 2 | . | 2 | . | **60** |
| *Lophocolea minor* | 3 | . | . | 2 | . | **40** |
| *Plagiomnium cuspidatum* | 2 | . | . | . | . | **20** |
| Number of relevé |  1 | 2 | 3 | 4  | 5 |  |
| *Ceratodon purpureus* | . | . | 1 | . | . | **20** |
| *Pseudoleskeella nervosa* | . | . | . | r | . | **20** |
| *Pylaisiella polyantha* | . | . | . | 1 | . | **20** |
| *Cladonia fimbriata* | . | . | . | . | + | **20** |
| *Bryum capillare* | . | r | . | . | . | **20** |
| *Pleurozium schreberi* | . | + | . | . | . | **20** |
| *Pohlia nutans* | . | + | . | . | . | **20** |
| *Hylocomium splendens* | . | + | . | . | . | **20** |
| *Dicranum bonjeanii* | . | 1 | . | . | . | **20** |

The locality number corresponds to that mentioned in the caption under Figure 1 in the text of the article.

Table 6. The communities of the order ***Dicranetalia scoparii*** Barkman 1958:

association ***Platygyrietum repentis*** Le Blanc ex Marstaller 1986 (1–5)

association ***Ptilidio pulcherrimi-Hypnetum pallescentis*** Barkman ex Willmanns 1962:

subass. ***P.p.-H.p.*** ***typicum*** (6–10);

subass. ***P.p.-H.p.*** ***callicladietosum haldanianii*** Baisheva 1995 (11–15)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of relevé | 1 | 2 | 3 | 4 | 5 | **C****O****N****S****T****A****N****C****Y** | 6 | 7 | 8 | 9 | 10 | **С****O****N****S****T****A****N****C****Y** | 11 | 12 | 13 | 14 | 15 | **C****O****N****S****T****A****N****C****Y** |
| Field number of relevé | 94 | 95 | 97 | 16/1 | 101 | 22 | 38 | 06/1 | 2/3 | 06/2 | 17/4 | 20 | 100 | 53 | 96 |
| Length of the plot, cm | 30 | 45 | 30 | 15 | 15 | 10 | 15 | 15 | 15 | 20 | 15 | 15 | 30 | 15 | 75 |
| With of the plot, cm | 10 | 10 | 20 | 10 | 15 | 10 | 15 | 15 | 10 | 10 | 15 | 15 | 15 | 15 | 25 |
| Cover (%) | 70 | 70 | 95 | 95 | 90 | 100 | 95 | 100 | 100 | 90 | 90 | 95 | 100 | 100 | 95 |
| Exposition | W | NW | NE |   |   |   | N |   |   |   |   |   |   |   |   |
| Heigh above the ground, cm | 130 | 100 | 130 |   |   |   |   |   |   |   |   |   |   |   |   |
| Base of tree (B)/Trunk (T) | T | T | T | B | B | B | B |   |   |   | B | B |   | B |   |
| Substrate | TC | TC | TC | TC | TC | BP | PS | R | BP | PS | BP | BP | R | BP | R |
| Locality number | 12 | 12 | 12 | 12 | 12 | 2 | 5 | 5 | 2 | 5 | 12 | 1 | 12 | 6 | 12 |
| Number of species  | 4 | 6 | 7 | 5 | 5 | 3 | 7 | 4 | 5 | 7 | 9 | 4 | 6 | 4 | 9 |
| D.s. of associations and subassociations |
| *Platygyrium repens* | 4 | 4 | 4 | 3 | 4 | **100** | . | . | . | . | . |  | . | . | . | . | . |  |
| *Jochenia pallescens* | . | . | + | . | 2 | **40** | 2 | 3 | 3 | 3 | 2 | **100** | 5 | 4 | 2 | 4 | 1 | **100** |
| *Ptilidium pulcherrimum* | . | . | r | . | . | 20 | 3 | 2 | . | r | 1 | **80** | + | 1 | 4 | 3 | . | **80** |
| *Callicladium haldanianum* | . | . | . | . | . |  | . | . | . | . | . |  | 1 | 2 | 2 | 2 | 4 | **100** |
| D.s. ofthe class ***Frullanio dilatatae-Leucodontetea sciuroidis*** and the order ***Orthotrichetalia*** |
| *Pylaisia polyantha* | . | r | . | + | r | **60** | . | . | . | . | . |  |  | . | . | . | . |  |
| *Lewinskya speciosa* | + | . | . | . | . | **20** | . | . | . | . | . |  |  | . | . | . | . |  |
| *Radula complanata* | . | . | . | + | . | **20** | . | . | . | . | . |  |  |  |  |  |  |  |
| D.s. ofthe order **D*icranetalia*** andthe alliance ***Dicrano-Hypnion*** |
| *Dicranum montanum* | . | 1 | 1 | . | . | **40** | . | 3 | . | . | 1 | **40** | 1 | 1 | 2 | 1 | + | **100** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Number of relevé | 1 | 2 | 3 | 4 | 5 |  | 6 | 7 | 8 | 9 | 10 |  | 11 | 12 | 13 | 14 | 15 |  |
| *Dicranum scoparium* | . | . | 2 | . | . | **20** | . | r | . | . | + | **40** | r | . | . | . | 1 | **40** |
| D.s. ofthe class ***Cladonio digitatae-Lepidozietea reptantis*** and ***Brachythecietalia*** |
| *Lophocolea heterophylla* | . | . | . | . | . |  | . | r | 1 | 1 | . | **60** | 1 | . | + | . | r | **60** |
| *Plagiothecium rossicum* | . | . | . | . | .  |  | . | . | . | . | .  |  | + | . | . | . | . | **20** |
| *Cladonia coniocraea* | . | 2 | . | . | . | **20** | . | . | . | . | 2 | **20** |  | . | . | . | . |  |
| D.s. of the order ***Brachythecietalia*** |
| *Amblystegium serpens* | . | . | . | . | . |  | . | . | . | . | . |  | . | . | . | . | r | **20** |
| *Brachythecium salebrosum* | . | . | . | + | . | **20** | . | . | r | . | . | **20** | . | . | . | . | . |  |
| *Sciuro-hypnum reflexum* |  |  |  |  |   |  | . | . | . | 2 | + | **40** | . | . | . | . | . |  |
| Other species: |
| *Hypogymnia physodes* | r | + | 2 | . | . | **60** | . | . | . | . | . |  | + | . | . | . | . | **20** |
| *Parmelia sulcata* | r | 1 |  | . | . | **40** | . | . | . | . | . |  | . | . | . | . | . |  |
| *Sanionia uncinata* | . | . | . | 1 | 1 | **40** | . | . | + | . | 2 | **40** | . | . | . | . | . |  |
| *Haplocladium microphyllum* | . | . | + | . | . | **20** | . | . | . | . | . |  | . | . | . | . | . |  |
| *Pleurozium schreberi* | . | . | . | . | r | **20** | . | . | . | . | . |  | + | . | r | . | . | **40** |
| *Pohlia nutans* | . | . | . | . | . |  | . | 2 | . | 2 | . | **40** | . | . | . | . | . |  |
| *Dicranum bonjeanii* | . | . | . | . | . |  | r | . | . | . | . | **20** | . | . | . | . | . |  |
| *Lophocolea minor* | . | . | . | . | . |  | . | r | . | . | . | **20** | . | . | . | . | r | **20** |
| *Oxalis acetosella* | . | . | . | . | . |  | . | . | . | . | . |  | . | . | . | . | r | **20** |
| *Tetraphis pellucida* | . | . | . | . | . |  | . | . | . | . | . |  | . | . | . | . | r | **20** |

The locality number corresponds to that mentioned in the caption under Figure 1 in the text of the article.