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TAXONOMIC NOTES ON *HEMICYCLIOPHORA* DE MAN  
(NEMATODA: *HEMICYCLIOPHORIDAE*)

by

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The genus *Hemicyclophora* de Man was revised by Brzeski (1974) who included 60 valid species. Since the publication of his paper 10 new species have been described, with another described here.

Another important contribution to the taxonomy of the genus is that of Eroshenko (1976) in which he lists 77 species, but does not recognize the synonyms proposed by Brzeski (1974).

The measurements and symbols used in this paper are the same as those proposed by Brzeski (1974).

*Hemicyclophora italiae* sp. n. (Fig. 1)

For measurements see Table I.

Outer cuticular layer loosely surrounds body. Annules rounded on both cuticular layers. Lateral field marked by anastomoses or breaks, no longitudinal lines or markings seen. Lip region with two annules. Lateral lips lower than the submedian ones. Labial disc slightly protruded, rectangular to rounded. Stylet knobs posteriorly elongated, with large cavity. Spermatheca filled with sperm. Vulval lips modified, body narrowed immediately posterior to vulva. Tail narrow slightly more dorsally than ventrally, tail end more or less offset. Annulation disappears on both cuticular layers of tail end. Tail tip rounded.

Male unknown.

Holotype female and 29 paratype females deposited in the nema-

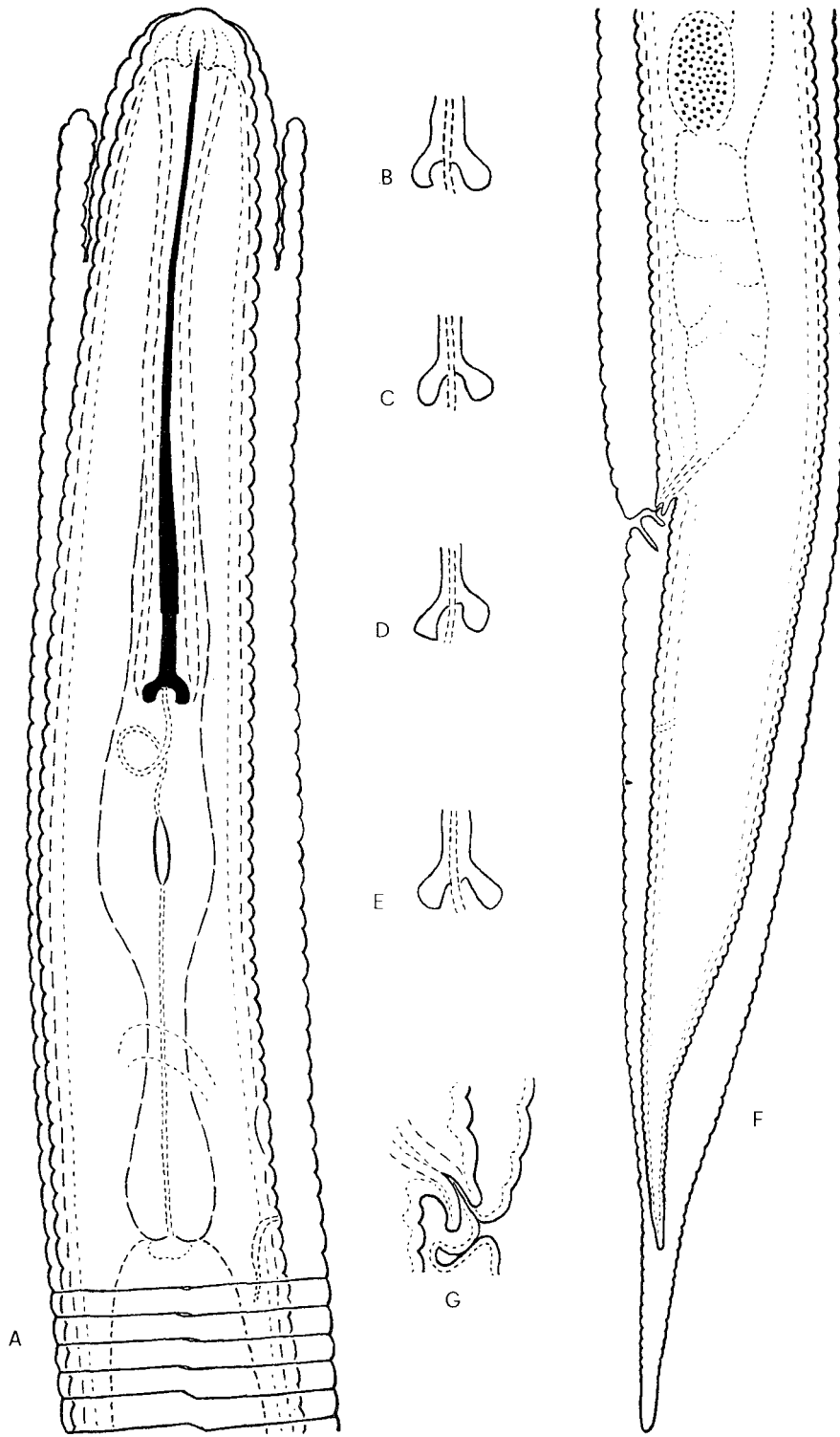


Fig. 1 - *Hemicycliophora italiae* sp. n.: A, anterior body part of female; B-E, variation of stylet knobs; F, posterior body part of female; G, vulval lips.

tode collection of the Research Institute for Vegetable Crops, Skierniewice, Poland.

Type locality and habitat: this species has been found in the following localities in Italy: Pescara, Davalos near Pescara, and Zapponeta in the province of Foggia. The holotype was selected from the Pescara population. In both localities near Pescara *H. italiae* sp. n. was found in nursery soil in the root zone of *Pinus* sp. In Zapponeta it was found in soil near onion roots. All the localities are very close to the Adriatic coast.

Differential diagnosis: *H. italiae* sp. n. is close to *H. conida* Thorne, from which it differs by being larger, having a longer stylet, more annules, and smooth cuticle without any ornamentation or lines on the lateral field. The tail end of *H. italiae* sp. n. is generally more offset than the tail of *H. conida*.

*Hemicycliophora subaolica* Jairajpuri et Baqri, 1973  
(Fig. 2 and 3)

For measurements see Table II.

Outer cuticle adpressed to the body, except for the tail region where it is looser. Outer cuticular annules flattened, inner annules rounded. Lateral field undifferentiated, sometimes marked by anastomoses. Outside lateral field numerous delicate scratches seen on most of the females. Lip region with three, rarely two annules. Labial disc rounded. Lateral lips lower than the submedian ones. Stylet knobs rounded, without cavity. Spermatheca filled with sperm. Vulval lips modified. Tail conical, narrows equally on dorsal and ventral sides. Tail end annulation distinct.

Male with four incisures on lateral field. Head flattened on anterior end, sometimes slightly expanded, delicately annulated. Excretory pore 141-147  $\mu\text{m}$  from the anterior end. The closest distance between the ends of spicule 21-27  $\mu\text{m}$ , gubernaculum 6-7  $\mu\text{m}$ .

The above description is proffered to extend the range of the variability of the species. It is based on the specimens collected in Tadjikistan in the various places of Gissarskij and Karateginskij mountain ranges, in soil surrounding the roots of *Amygdalus bucharica* Korsh., *Prunus sogdiana* Vass., *Sorbus persica* Hedl. et Colutea, *Juniperus seravschanica* Komm., *Cerasus* sp., *Malus* sp. and *Rosa* sp. Roots of infested cherry and almond trees were shortened and thick-

Table I - *Measurements of Hemicycliophora italiae* sp. n.

Character	Holotype female	Paratypes from population						
		Pescara, 13 ♀		Zapponeta, 6 ♀		Davalos, 10 ♀		Giant female
		Mean	Range	Mean	Range	Mean	Range	
Body length, mm	1.01	1.14	0.94 - 1.30	1.09	0.98 - 1.28	1.18	1.06 - 1.24	1.71
a	29	25	22 - 30	26	23 - 28	24	23 - 26	30
b	5.2	5.6	5.0 - 6.0	5.7	5.2 - 6.5	5.9	5.5 - 6.5	6.7
c	9.8	8.7	8.1 - 9.8	9.7	8.9 - 10.6	8.9	8.1 - 10.1	8.3
V	85	84	82 - 85	86	85 - 87	84	82 - 85	83
stylet, $\mu$ m	105	108	100 - 112	106	101 - 114	111	109 - 116	133
m	82	84	83 - 86	83	82 - 84	84	76 - 86	83
VT / VB	5.2	4.9	3.7 - 6.0	4.7	3.8 - 5.3	4.9	4.4 - 5.5	6.3
Tail % V-T	67	70	63 - 76	73	67 - 78	70	66 - 74	69
R	290	290	271 - 322	247	232 - 264	283	266 - 315	433
Rex	55	53	50 - 57	46	44 - 49	53	51 - 57	69
Rv	228	230	219 - 246	197	185 - 208	225	215 - 248	319
Rva	17	16	13 - 19	14	12 - 16	17	15 - 20	25
Rt	45	44	34 - 50	36	32 - 42	41	33 - 49	89

Table II - *Measurements of Hemicycliophora subaolica Jairajpuri et Baqri from Tadjikistan, U.S.S.R.*

Character	25 females		11 males	
	Mean	Range	Mean	Range
Body length, mm	0.90	0.79 - 1.00	0.80	0.74 - 0.90
a	24	20 - 28	36	30 - 45
b	5.3	4.8 - 6.1		
c	9.8	8.6 - 11.2	8.2	6.8 - 9.2
V	86	84 - 88		
Stylet, $\mu\text{m}$	99	91 - 105		
m	85	82 - 86		
Tail % V-T	74	65 - 82		
R	227	205 - 253		
Rex	45	40 - 55		
Rv	188	166 - 214		
Rva	10	7 - 14		
Rt	28	22 - 41		
Spicules, $\mu\text{m}$			37	35 - 41
Gubernaculum, $\mu\text{m}$				7

ened (Fig. 4), and many nematodes feeding on the diseased roots were observed.

The above description differs from the description of the type specimens (Jairajpuri *et* Baqri, 1973) in the following points:

— lateral field undifferentiated in types, while some females studied by us show discontinuity of annulation on lateral field,

— longitudinal lines absent in types, but very delicate scratches seen on most of females from Tadjikistan,

— head bearing two annules in the original description and two and a half on the drawing 4B of Jairajpuri and Baqri (1973), while 2-3 annules were observed in our material.

Since no other differences can be seen, we conclude that the Tadjikistan specimens are conspecific with *H. subaolica*. This species has been described from mountains in Himachal Pradesh, the north Indian state.

#### *Hemicycliophora sheri* Brzeski, 1974

For measurements see Table III.

*H. sheri* has been described on the basis of 6 females from Cali-

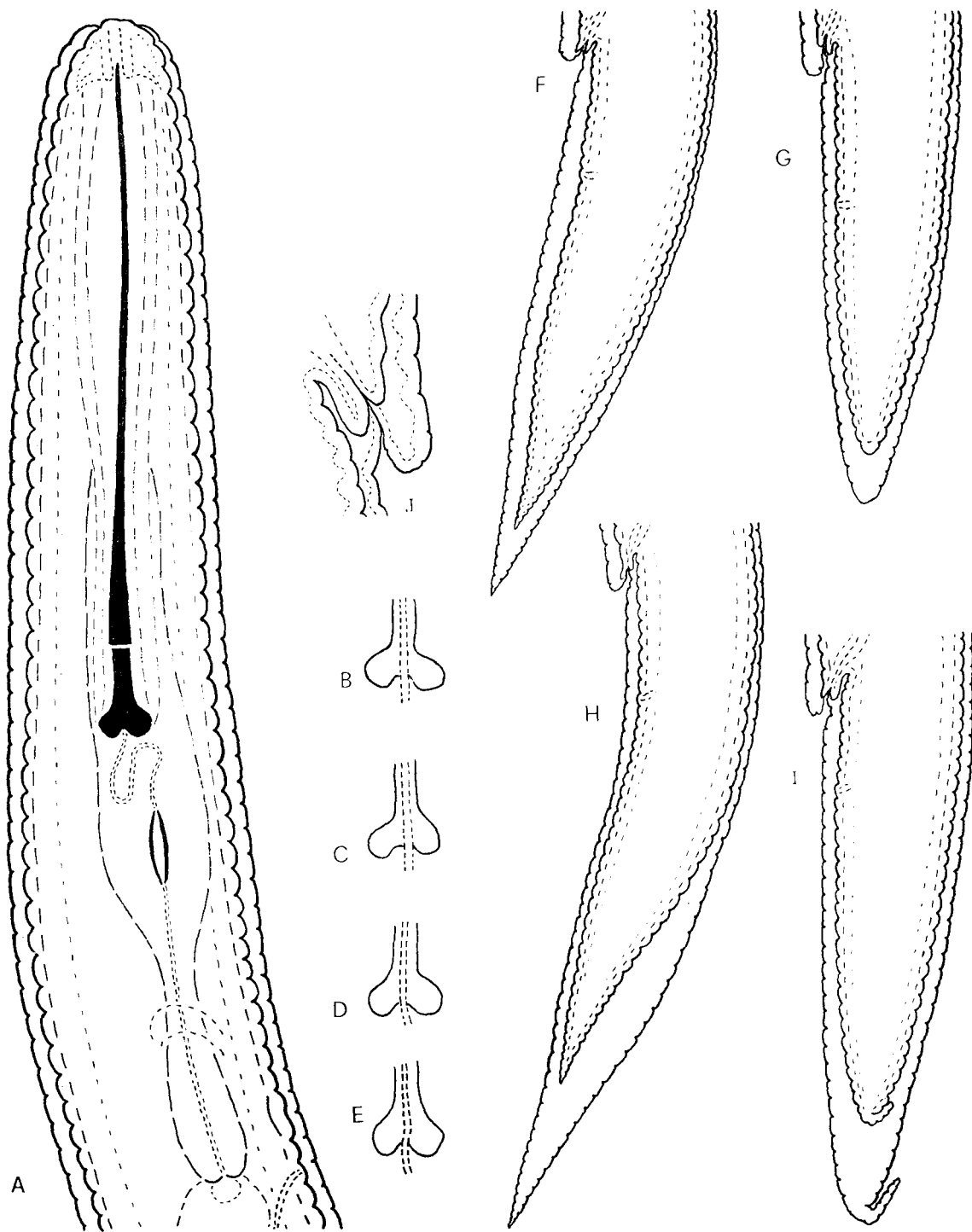


Fig. 2 - *Hemicycliophora subaolica* - female: A, anterior body part; B-E, variation of stylet knobs; F-I, variation of posterior body part; J, vulval lips.

Table III - *Measurements of 10 ♀ of Hemicyclophora sheri Brzeski from Kansas, U.S.A.*

Character	Mean	Range
Body length, mm	1.21	1.15 - 1.26
b	6.1	5.9 - 6.5
c	10.3	9.1 - 11.7
V	85	83 - 87
stylet, $\mu\text{m}$	114	110 - 117
m		83 - 84
Tail % V-T	66	64 - 69
R	331	320 - 348
Rex	64	61 - 67
Rv	263	254 - 276
Rva	21	18 - 24
Rt	47	39 - 50

fornia. Ten additional females were collected in a grass soil from Kansas, U.S.A. These females differ from those of the type population by being larger, although the number of annules is similar. This species is characterized by large rounded labial disc, three lip annules, stylet knobs with cavity, moderately elongated vulval lips, and slightly offset tail end.

#### Note on giant females

Giant females were reported by Jairajpuri and Baqri (1973) in their description of *H. sobaolica*, and a similar variation was found in a population of *H. italiae* (Table I). These females are larger and have more annules, but otherwise they do not differ from other specimens. Although not shown experimentally, we concur with the opinion of Jairajpuri and Baqri (1973) that they are morphological variants. The presence of giant females in some populations emphasises the statement made earlier (Brzeski, 1974) that it is always risky to base an identification on a single female.

#### Key for identification of *Hemicyclophora* females

This key is based on one published by Brzeski (1974). Some species are inserted twice, because certain characters (mainly the

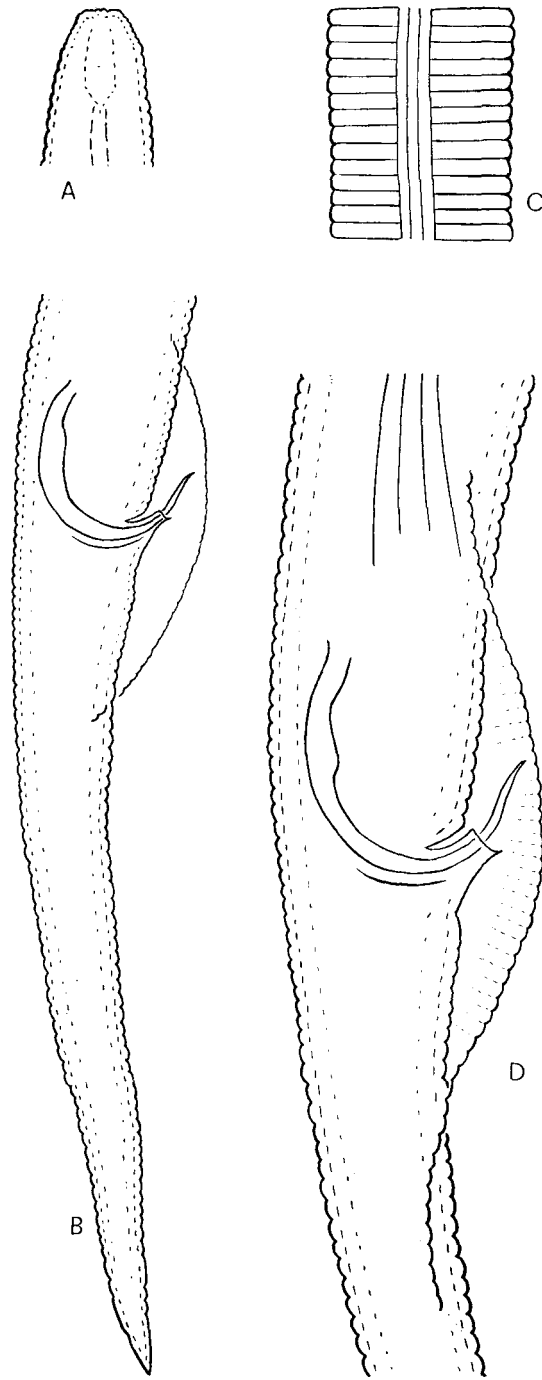


Fig. 3 - *Hemicycliophora subaolica* - male: A, head; B, tail; C, part of lateral field; D, cloacal region.



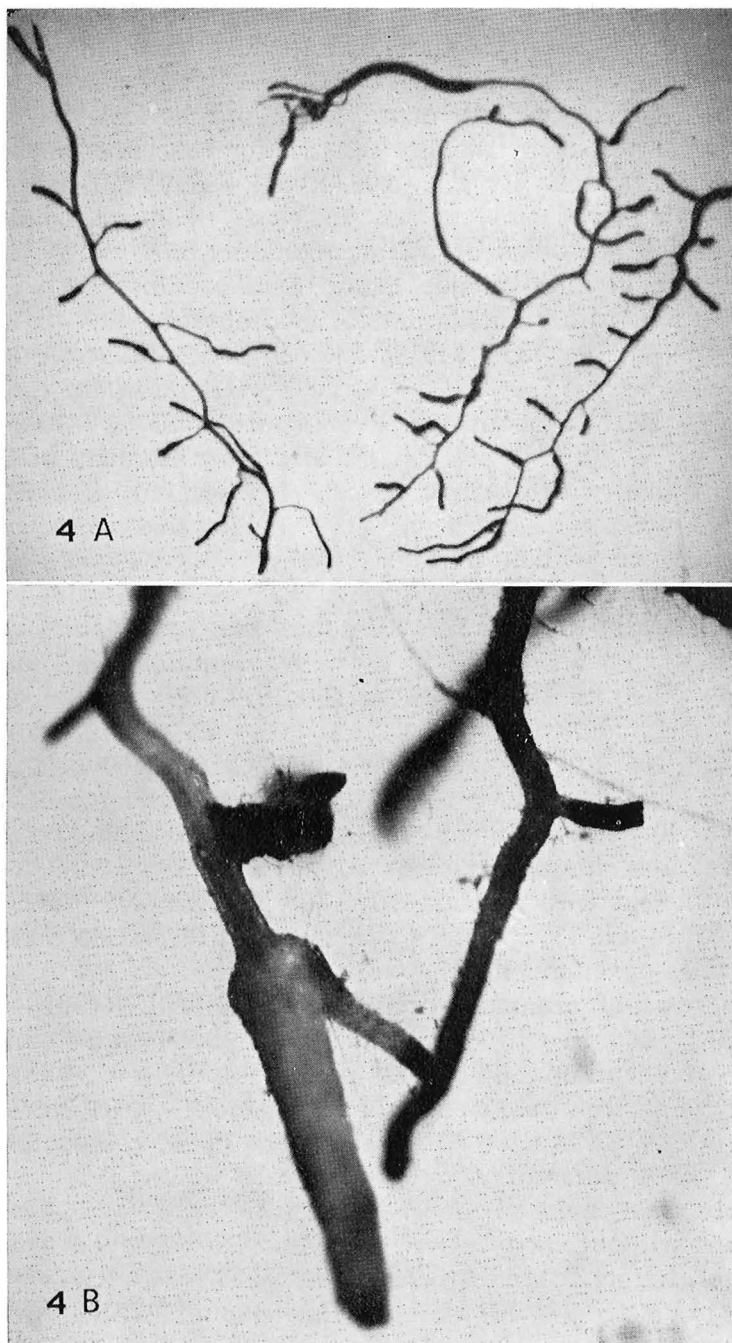


Fig. 4 - Roots infested by *Hemicycliophora subaolica*: A, *Amygdalus bucharica*; B, *Cerasus* sp.

cuticular sculpture) show variation among populations of the same species. We feel that it should facilitate identification.

1. Tail terminus hemispherical . . . . . 2
- Tail terminus obtuse or acute, not hemispherical . . . . . 8
2. Lip region offset by distinct constriction, one line on lateral field, R 187 - 219, Rv 179 - 208, Rva 1 - 2, VT/VB 0.5 - 1.0, St 84 - 135 . . . . . *H. truncata* Colbran, 1956
- Lip region not offset by distinct constriction . . . . . 3
3. Longitudinal lines outside lateral field present . . . . . 4
- Longitudinal lines outside lateral field absent . . . . . 5
4. R. 147 - 156, Rv 135 - 142, Rva 4 - 5, St 92 - 105 . . . . .
- . . . . . *H. tessellata* Sauer, 1958
- R 205 - 220, Rv about 170, Rva about 16, St 66 - 71 . . . . .
- . . . . . *H. straturata* Germani et Luc, 1973
5. Lateral field with one line, R 150 - 183, Rv 146 - 172, Rva 2, St 74 - 103 . . . . . *H. brevicauda* Sauer, 1958
- Lateral field without lines . . . . . 6
6. Stylet less than 100 . . . . . 7
- St 114 - 128, R 255 - 277, Rv about 220, Rva 21 . . . . .
- . . . . . *H. rotundicauda* Thorne, 1955
7. R 219 - 268, Rv 189 - 234, Rva 11 - 19, St 79 - 98 . . . . .
- . . . . . *H. obtusa* Thorne, 1955
- R 141 - 206, Rv 120 - 181, Rva 4 - 11, St 60 - 100 . . . . .
- . . . . . *H. arenaria* Raski, 1958
8. Vulval lips not modified . . . . . 9
- Vulval lips elongated . . . . . 16
9. Lateral field with two lines, R 250 - 327, Rv 204 - 252, Rva 15 - 33, St 85 - 139 . . . . . *H. ferrisae* Brzeski, 1974
- No lines on lateral field . . . . . 10
10. Two rows of ornamentations on lateral field, R 301 - 315, Rv 262 - 266, Rva 10 - 19, St 86 - 120 . . . . . *H. ovata* Colbran, 1962
- No ornamentation on lateral field . . . . . 11
11. Tail cylindrical, then wedge shaped, R 216 - 244, Rv 183 - 203, Rva 9 - 19, St 93 - 108 . . . . . *H. robusta* Loof, 1968
- Tail shape different . . . . . 12
12. Knobs with cavity of moderate size . . . . . 13
- Knobs without cavity . . . . . 15
13. Posterior part of tail distinctly offset, R 242 - 343, Rv 187 - 249, Rva 16 - 30, St 77 - 101 . . . . . *H. thienemanni* (W. Schneider, 1925)
- Posterior part of tail slightly or not offset . . . . . 14

14. Lip region truncate, tail end slightly offset, R 273 - 363, Rv 206 - 283, Rva 22 - 34, St 86 - 116 . *H. vaccinium* Jenkins *et* Reed, 1963
- Lip region rounded, tail conical, R 258 - 303, Rv 206 - 226, Rva 20 - 24, St 82 - 91 . . . . . *H. uniformis* Thorne, 1955
15. Lateral field with two rows of ornamentations, tail greatly elongated, R 344 - 370, Rv 268 - 289, Rva 21-29, St 133 - 149 . . . . . *H. gigas* Thorne, 1955
- Lateral field without ornamentations, tail not so elongated, R 430, Rv 342, Rva 30, St 123 . . . . . *H. tenuis* Thorne, 1955
16. No longitudinal lines or markings outside lateral field . . . . . 33
- Longitudinal lines or markings outside lateral field, at least on posterior part of body . . . . . 17
17. Cuticular ornamentation present on entire sheath . . . . . 18
- Cuticular ornamentation present on posterior part of body only, lateral field with a line, R 216 - 270, Rva probably 8 - 16, St 70 - 84 . . . . . *H. madagascariensis* Germani *et* Luc, 1973
18. Vulval lips form an elongated sleeve . . . . . 19
- Vulval lips modified, but do not form a sleeve . . . . . 20
19. Knobs with distinct cavity, R 232 - 318, Rva 21 - 31, St 71 - 91 . . . . . *H. penetrans* Thorne, 1955
- Knobs without cavity, R. 225 - 331, Rva 10 - 20, St 58 - 94 . . . . . *H. oostenbrinki* Luc, 1958
20. Tail cylindrical or conical, suddenly narrow in posterior part . . . . . 21
- Tail more or less conical, without sudden narrowing . . . . . 27
21. Tail narrow more on dorsal than on ventral side . . . . . 22
- Tail narrow evenly on dorsal and ventral sides forming a finger-like terminus, knobs with cavity, R 225 - 235, Rv 185 - 193, Rva 9 - 14, St 105 - 125 . . . . . *H. halophila* Yeates, 1967
22. Average stylet length more than 110 . . . . . 23
- Average stylet length less than 100 . . . . . 24
23. Spermatheca empty, isthmus considerably long, R 257 - 277, Rva 15 - 19, St 110 - 114 . . . . . *H. macrithmus* Loof, 1968
- Spermatheca with sperm, R 277, Rva about 20, St 136 . . . . . *H. aquatica* (Micoletzky, 1913)
24. Short scratches outside lateral field . . . . . 25
- Irregular lines outside lateral field . . . . . 26
25. Lip region with 2 annules, not offset, R 227 - 264, Rv 160 - 173, Rva 13 - 18, St 82 - 91 . . . . . *H. nortoni* Brzeski, 1974
- Lip region with three annules, offset, R 230 - 241, Rva 12 - 14,

- St 104 - 113 . . . . . *H. juglandis* Choi et Geraert, 1975
26. Stylet 60 - 70, tail end slightly offset, R 176 - 223, Rv 135 - 210,  
Rva 8 - 15 . . . . . *H. typica* de Man, 1921
- Stylet 82 - 90, tail end more sharply offset, R 213 - 232, Rva  
about 20 or more . . . . . *H. nigeriensis* Germani et Luc, 1973
27. Tail conical, narrow evenly . . . . . 28
- Tail cylindrical, then wedge-shaped . . . . . 32
28. R 366 - 461, St 119 - 142, Rva 15-21 . *H. micoletzkyi* Goffart, 1951
- R less than 300 . . . . . 29
29. Regular longitudinal lines outside lateral field, R about 170,  
Rva 9 - 13, St 50 - 61 . . . . . *H. transvaalensis* Heyns, 1962
- Short scratches outside lateral field . . . . . 30
30. Knobs without cavity, R 205 - 253, Rv 166 - 214, Rva 7 - 14,  
St 89 - 105 . . . . . *H. subaolica* Jairajpuri et Baqri, 1973
- Knobs with distinct cavity, R 175 - 274, Rv 140 - 216, Rva 9 -  
21, St 69 - 101 . . . . . *H. conida* Thorne, 1955
31. Knobs with cavity . . . . . 32
- Knobs without cavity, R 166 - 201, Rv 133 -163, Rva 9 - 13,  
St 86 - 94 . . . . . *H. raskii* Brzeski, 1974
32. Anterior bulb large, R 165 - 209, Rva 9 - 17, St 76 - 93 . . . . .  
. . . . . *H. epicharoides* Loof, 1968
- Anterior bulb more elongated, variable species, R 176 - 256,  
Rva 9 - 17, St 78 - 143 . . . . . *H. koreana* Choi et Geraert, 1971
33. Lip region with 3 separated annules, R 286 - 326, Rva 17 - 25,  
St 100 - 119 . . . . . *H. hesperis* Raski, 1958
- Lip region annules not separated . . . . . 34
34. Lateral field with lines or ornamentations . . . . . 35
- Lateral field with anastomoses and/or breaks of stride . . . . . 52
35. Lateral fields with lines only . . . . . 36
- Lateral field with ornamentations . . . . . 49
36. Tail more or less conical, elongated, posterior part not di-  
stinctly offset . . . . . 43
- Posterior part of tail distinctly offset, if not then short . . . . . 37
37. Tail end forms spicate terminus . . . . . 38
- Tail end shorter, less offset . . . . . 39
38. Body length 0.9 - 1.1, R 320 - 355, Rva about 28, St. 82 - 193  
. . . . . *H. tarjani* Khan et Basir, 1963
- Body length 1.2 - 1.5, R 349 - 395, Rva 24 - 31, Rv 268 - 312,  
St 111 - 132 . . . . . *H. gracilis* Thorne, 1955
39. Lateral field with a distinct line . . . . . 40

- Lateral field with 2 lines, the third one may be traced . . . . . 41
40. St 62 - 73, R 181 - 263, Rv 142 - 182, Rva 10 - 15 . . . . .  
. . . . . *H. labiata* Colbran, 1960
- St 95 - 113, R 174 - 196, Rv 142 - 163, Rva 10 - 16 . . . . .  
. . . . . *H. floridensis* Chitwood et Birchfield, 1957
41. Tail end narrow evenly on dorsal and ventral sides . . . . . 42
- Tail end narrow more on dorsal side, R 277 - 264, Rv 160 -  
173, Rva 13 - 18, St 82 - 91 . . . . . *H. nortoni* Brzeski, 1974
42. Knobs elongated with large cavity, R 165 - 209, Rva 9 - 17,  
St 76 - 93 . . . . . *H. epicharoides* Loof, 1968
- Knobs rounded with small cavity, R 202 - 260, Rva 11 - 23,  
St 67 - 81 . . . . . *H. triangulum* Loof, 1968
43. Rva usually less than 30 . . . . . 44
- Rva about 59, R 385 - 420, St 82 - 95 . . . . .  
. . . . . *H. eugeniae* Khan et Basir, 1963
44. Single short lateral line at the level of spermatheca, R 273 -  
307, Rva 11 - 17, St 102 - 110 . . . . . *H. ritteri* Berdon Brizuela, 1963
- Lateral line longer, single or double . . . . . 45
45. Annulation disappears on tail end, R 263 - 328, Rva about  
16 - 17, St 76 - 90 . . . . . *H. dioalensis* Germani et Luc, 1973
- Annulation on tail end distinct . . . . . 46
46. Knobs rounded without cavity, labial disc elevated, R 258 -  
262, Rva 12 - 16, St 95 . . . . . *H. andrassyi* Brzeski, 1974
- Knobs elongated with cavity, labial disc not elevated . . . . . 47
47. Tail tip obtuse rounded, R 234 - 293, Rva 13 - 19, St 81 - 94  
. . . . . *H. parvana* Tarjan, 1952
- Tail tip acute or subacute . . . . . 48
48. R 217 - 272, Rva about 13, St 48 - 89 . . . . .  
. . . . . *H. belemnus* Germani et Luc, 1973
- R 282 - 375, Rva 16 - 21, St 81 - 101 . . . . .  
. . . . . *H. lutosa* Loof et Heyns, 1969
49. Anterior vulval lip with spicate projection, R 255 - 357, Rv  
224 - 306, Rva 6 - 13, St 73 - 110 . . . . . *H. spinosa* Colbran, 1969
- Anterior vulval lip without spicate projection . . . . . 50
50. Rva 4 - 6, R 218 - 251, Rv 187 - 219, St 78 - 90 . . . . .  
. . . . . *H. saueri* Brzeski, 1974
- Rva 9 or more . . . . . 51
51. Lateral field marked by anastomoses bordered on both sides  
by rows of ornamentations, R 175 - 274, Rv 140 - 216, Rva 9 -  
21, St 69 - 101 . . . . . *H. conida* Thorne, 1955

- Lateral field with central row of ornamentation bordered by two lines, R 234 - 293, Rv 182 - 229, Rva 13 - 19, St 81 - 94  
     . . . . . *H. parvana* Tarjan, 1952
- 52. Tail cylindrical, then short wedge-shaped . . . . . 53
- Tail conical, more or less elongated . . . . . 61
- 53. Vulva anus distance equal or shorter than tail . . . . . 54
- Vulva anus distance distinctly longer than tail, R 244 - 255,  
     Rv 209 - 218, Rva 19 - 23, St 80 - 126 . *H. aberrans* Thorne, 1955
- 54. Knobs elongated with large cavity . . . . . 55
- Knobs without or with very small cavity . . . . . 57
- 55. Tail end annules approximately equal in size to other tail annules . . . . . 56
- Tail end annules smaller than other tail annules, R 165 - 209,  
     Rva 9 - 17, St 76 - 93 . . . . . *H. epicharoides* Loof, 1968
- 56. Isthmus very short, basal bulb expanded, R 188 - 219, Rv 158 - 181, Rva 11 - 16, St 97 - 112 . . . . . *H. iwia* Brzeski, 1974
- Isthmus longer, basal bulb smaller, R 158 - 179, Rva 11 - 16, St 69 - 83 . . . . . *R. epicharis* Raski, 1958
- 57. Tail more curved dorsally, vulva anus distance in average equal to tail length . . . . . 58
- Tail end equally curved on both sides, vulva anus distance in average shorter than tail length . . . . . 59
- 58. St 90 - 103, R 252 - 280, Rv 208 - 232, Rva 13 - 21 . . . . .  
     . . . . . *H. striatula* Thorne, 1955
- St 111 - 116, R 265 - 289, Rv 212 - 237, Rva 18 - 24 . . . . .  
     . . . . . *H. obesa* Thorne, 1955
- 59. Stylet length less than 100 . . . . . 60
- St 112 - 123, R 182 - 261, Rv 182 - 230, Rva 9 - 11 . . . . .  
     . . . . . *H. brevis* Thorne, 1955
- 60. R 210 - 241, Rv 172 - 195, Rva 11 - 18, St 85 - 100 . . . . .  
     . . . . . *H. californica* Brzeski, 1974
- R 166 - 201, Rv 134 - 163, Rva 9 - 13, St 86 - 94 . . . . .  
     . . . . . *H. raskii* Brzeski, 1974
- 61. Rva 9 or more . . . . . 62
- Rva 3 - 7, R 176 - 208, Rv 166 - 187, St 80 - 112 . . . . .  
     . . . . . *H. natalensis* Loof et Heyns, 1969
- 62. Average stylet length less than 120 . . . . . 64
- Stylet longer . . . . . 63
- 63. Knobs without cavity, two lip annules, labial disc rounded, R 320 - 373, Rva 18 - 30, St 130 - 151 . . . . . *H. nucleata* Loof, 1968

- . Knobs with cavity, three lip annules, labial disc rectangular,  
R 342 - 401, Rv 267 - 309, Rva 25 - 30, St 126 - 152 . . . . .  
. . . . . *H. mettleri* Jenkins et Reed, 1964
- 64. V 78 or more . . . . . 65
- . V 74 - 78, tail elongated conical, R 263 - 281, Rva 21 - 29, St  
87 - 101 . . . . . *H. loofi* Maas, 1970
- 65. Average stylet length more than 70 . . . . . 66
- . St 64 - 74, R 174 - 206, Rva 12 - 20 . . . . .  
. . . . . *H. pauciannulata* Luc, 1958
- 66. Vulval sleeve not elongated . . . . . 67
- . Vulval sleeve greatly elongated, R 262 - 303, Rva 17 - 21, St  
90 - 103 . . . . . *H. pruni* Kirjanova et Shagalina, 1974
- 67. Knobs elongated with large cavity . . . . . 68
- . Knobs not elongated, cavity small or absent . . . . . 72
- 68. Rva 9 - 21 . . . . . 69
- . Rva 21 or more . . . . . 71
- 69. Tail end annulation indistinct, St 100 - 116, R 232 - 322, Rv  
185 - 248, Rva 12 - 20 . . . . . *H. italiae* sp. n.
- . Tail end annulation distinct, average stylet length less than  
100 . . . . . 70
- 70. R 175 - 274, Rva 9 - 21, St 69 - 101, tail short conical . . . . .  
. . . . . *H. conida* Thorne, 1955
- . R 282 - 375, Rva 16 - 21, St 81 - 101, tail elongated conical . . . . .  
. . . . . *H. lutosa* Loof et Heyns, 1969
- 71. Labial disc rectangular, R 317 - 416, Rv 246 - 333, Rva 24 - 40,  
St 78 - 125 . . . . . *H. vidua* Raski, 1958
- . Labial disc rounded, R 320 - 345, Rv 247 - 270, Rva 21 - 29,  
St 92 - 101 . . . . . *H. sheri* Brzeski, 1974
- 72. Tail end slightly offset . . . . . 74
- . Tail end distinctly offset . . . . . 73
- 73. Lip region with 3 annules, R 247 - 293, St 80 - 90 . . . . .  
. . . . . *H. salicis* Sofrygina, 1972
- . Lip region without annulation, R 219 - 273, Rva 15 - 19, St  
91 - 106 . . . . . *H. thornei* J. B. Goodey, 1963
- 74. Tail more curved on dorsal side . . . . . 75
- . Tail conical slightly offset on both sides, R 253, Rv 195, Rva  
12, St 90 . . . . . *H. chilensis* Brzeski, 1974
- 75. Labial disc rectangular . . . . . 76
- . Labial disc rounded, R 276 - 305, Rv 223 - 251, Rva 15 - 23,  
St 88 - 96 . . . . . *H. similis* Thorne, 1955

76. V 80 - 85, Rva 19 - 28, R 239 - 296, Rv 183 - 231, St 87 - 109  
 . . . . . *H. zuckermani* Brzeski, 1963  
 —. V 84 - 87, Rva 19 or less . . . . . 77  
 77. R 196 - 229, Rva 15 - 19, St 91 - 106 . . . . . *H. minor* Wu, 1966  
 —. R 273 - 306, Rva 11 - 14, St 94 - 101 . . . . . *H. shepherd* Wu, 1966

#### S U M M A R Y

*Hemicycliophora italiae* sp. n. from Italian Adriatic coast is described. It differs from *H. conida* Thorne, 1955 by being larger, having longer stylet, more annules, and cuticle without any ornamentation. *H. subaolica* Jairajpuri et Baqri, 1973 is redescribed from specimens collected in the mountains of Tadjikistan, U.S.S.R., and *H. sheri* Brzeski, 1974 is reported from Kansas, U.S.A. A key for the identification of *Hemicycliophora* females is given. The genus contains a total of 71 species.

#### R I A S S U N T O

Note tassonomiche su *Hemicycliophora* de Man (Nematoda: Hemicycliophoridae).

È descritta *Hemicycliophora italiae* n. sp., raccolta in varie località della costa adriatica italiana. Essa differisce da *H. conida* Thorne, 1955 per le maggiori dimensioni del corpo e dello stiletto e per avere un maggior numero di anelli e la cuticola senza ornamentazioni. Viene ridescritta *H. subaolica* Jairajpuri et Baqri, 1973 su esemplari raccolti sulle montagne del Tadjikistan, URSS, e *H. sheri* Brzeski, 1974 è segnalata per la prima volta in Kansas, U.S.A. Viene, inoltre, proposta una chiave per l'identificazione delle 71 specie appartenenti a questo genere.

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Accepted for publication on 10 April, 1978.