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## SUMMARY

A list of subgenera, species and subspecies currently included in the tick genera *Haemaphysalis*, *Anocentor* and *Cosmiomma*, *Dermacentor* is given in this paper; included are also the synonym(s) and the author(s) for each species. Future volume will include the tick species for all remaining genera.

**Key-Words :** *Haemaphysalis*, *Anocentor*, *Cosmiomma*, *Dermacentor*, species, synonyms.

## RESUMEN

En este artículo se proporciona una lista de los subgéneros, especies y subespecies de los géneros de garrapatas *Haemaphysalis*, *Anocentor*, *Cosmiomma* y *Dermacentor*. También se incluyen la(s) sinonimia(s) y autor(es) para cada especie. En futuros volúmenes se incluirá las especies de garrapatas de los restantes géneros.

**Palabras-Clave :** *Haemaphysalis*, *Anocentor*, *Cosmiomma*, *Dermacentor*, especies, sinonimias.

## GENERAL OBSERVATIONS

Following is a list of species and subspecies of ticks described in the genera *Haemaphysalis*, *Anocentor*, *Cosmiomma*, and *Dermacentor*. Additional volumes will include tick species for all the remaining genera. The list is intended to include synonyms for the species, as currently considered. For each synonym, date, proposed or used name, and author, are included. For species and subspecies, the basic information regarding author, publication, and date of publication is given, and also the genus in which the species or subspecies have been placed. The complete list of references is included at the end of the paper. If the original paper and/or specimens have not been directly observed by myself, an explanatory note about the paper proposing the new synonym is included.

Three works have been used as main source of references. The compilation of Mildred A. Doss and George Anastos (1977) was used as a primary reference book. For the genus *Haemaphysalis*, the "Nuttall Tick Catalogue" by J.E. Keirans and the chapter by Hoogstraal & Kim on the evolution of the genus *Haemaphysalis* (see references) were also used as basic works. For *Anocentor*, *Cosmiomma*, and *Dermacentor*, my own observations and additional papers on these genera are included, because the book by Arthur lack several species today considered as valid ones.

Notes on subgenera are also included for each species. But notice that, in example, Keirans do not include subgenera in the compilation of the Catalogue from G.H.F. Nuttall. On the other hand, subgenera proposed by Santos Dias for *Dermacentor* species are not currently accepted as a whole. In such a way, the reference is included, but subgeneric arrangement of *Dermacentor* await an in deep study.

I gratefully acknowledged the comments of Dr. Pierre-C. Morel, mainly dealing with the genus *Dermacentor*, and those of Dr. J.A.T. Santos Dias on the genus *Haemaphysalis*. I indeed am grateful to readers who call my attention to errors and omissions in the first two volumes of the "Index-catalogue of the Ticks of the World".

**GENUS *HAEMAPHYSALIS* KOCH, 1844.**

***Haemaphysalis aborensis*** Warburton, 1913.

Parasitology, 6(2): 121-122.

1913: *H. aborensis*; original description.

1915: *H. aborensis*; Nuttall & Warburton.

1928: *H. birmaniae* Supino; Sharif (see Hoogstraal, 1970).

1944: *H. aborensis*; Toumanoff.

1971: *H. (Aborphysalis) aborensis*; Hoogstraal, Dhanda, & El Kammah.

***Haemaphysalis aciculifer*** Warburton, 1913.

Parasitology, 6(2): 121-126.

1913: *H. aciculifer*; original description.

1915: *H. aciculifer*; Nuttall & Warburton.

1930: *H. aciculifer*; Tonelli-Rondelli.

1945: *H. aciculifer*; Theiler.

1956: *H. aciculifer*; Hoogstraal.

1972: *H. (Kaiseriana) aciculifer*; Hoogstraal & El Kammah.

1984: *H. aciculifer*; Keirans.

1985: *H. (K.) aciculifer*; Hoogstraal & Kim.

1987: *H. aciculifer*; Matthysse & Colbo.

***Haemaphysalis aciculifer rugosa*** Santos Dias, 1956.

Mem. Estud. Mus. Zool. Univ. Coimbra, 242: 5-8.

See notes under the item *H. rugosa*.

***Haemaphysalis aculeata*** Lavarra, 1904.

Bol. Soc. Zool. Ital., 5(7-8): 255-256.

1904: *H. aculeata*; original description.

1910: *H. longipalpis*; Warburton (as new species; see notes in Santos Dias, 1961).

1915: *H. aculeata*; Nuttall & Warburton.

1971a: *H. (Kaiseriana) aculeata*; Hoogstraal.

1985: *H. (K.) aculeata*; Hoogstraal & Kim.

***Haemaphysalis adleri*** Feldman-Muhsam, 1951. Bull. Res. Counc.

Israel, 1(3): 104-105.

1951: *H. adleri*; original description.

1965: *H. (Rhipistoma) adleri*; Hoogstraal, Kohls, & Trapido.

1985: *H. (R.) adleri*; Hoogstraal & Kim.

***Haemaphysalis africana*** Howard, 1909.

Ann. Transv. Mus., 1(4): 219-223.

See notes under the item *H. hoodi*.

***Haemaphysalis ambigua*** Neumann, 1901.

Mém. Soc. Zool. Fr., 14(2-3): 262-263.

See notes under the item *H. inermis*.

***Haemaphysalis anomala*** Warburton, 1913.

Parasitology, 6(2): 121, 128.

1913: *H. cornigera anomala*, original description.

1915: *H. cornigera anomala*; Nuttall & Warburton.

1928: *H. cornigera anomala*; Sharif.

1944: *H. cornigera anomala*; Toumanoff.

1967: *H. (Kaiseriana) anomala*; Hoogstraal & Rack (as full species).

1967: *H. (K.) anomala*; Hoogstraal, Kohls, & Trapido.

1985: *H. (K.) anomala*; Hoogstraal & Kim.

***Haemaphysalis anoplos*** Hoogstraal, Uilenberg, & Klein, 1967.

J. Parasitol., 53(5): 1103-1105.

1967: *H. (Rhipistoma) anoplos*; original description.

1979: *H. (incertae sedis) anoplos*; Hoogstraal, Uilenberg, & Klein: "...l'identification subgenerique d'*H. anoplos* (is) très difficile."

*Haemaphysalis aponommooides* Warburton, 1913.

Parasitology, 6(2): 128-129.

1913: *H. inermis aponommooides*, original description.1915: *H. inermis aponommooides*; Nuttall & Warburton.1938: *H. inermis aponommooides*; Delpy.1961: *H. (Alloceraea) inermis aponommooides*; Hoogstraal.1962: *H. (A.) aponommooides*; Hoogstraal (as full species).1971: *H. (A.) aponommooides*; Hoogstraal & Mitchell.1985: *H. (A.) aponommooides*; Hoogstraal & Kim.*Haemaphysalis asiatica* (Supino, 1897).

Atti Soc. Ven-Trent. Sc. Nat. Padova, 3(1): 237-238.

1897: *Opisthodon asiaticus*; original description.1897: *H. asiatica*; Neumann.1909: *H. dentipalpis*; Warburton & Nuttall (as new species).1915: *H. dentipalpis*; Nuttall & Warburton.1915: *H. leachi* (Audouin) (misidentification); Nuttall & Warburton.1963: *H. (Sugimotoiana) dentipalpis*; Santos Dias.1966: *H. (Rhipistoma) asiaticus*; Hoogstraal & Trapido.1985: *H. (R.) asiatica*; Hoogstraal & Kim.*Haemaphysalis atherurus*. Hoogstraal, Trapido, & Kohls, 1965.

J. Parasitol., 51(1): 118-125.

1957: *H. birmaniae* Supino (misidentification); Kohls.1960: *H. birmaniae* (misidentification); Audy, Nadchatram & Lim.1965: *H. atherurus*; original description.1966: *H. (H.) atherurus*; Hoogstraal1971: *H. (Aborphysalis) atherurus*; Hoogstraal, Dhanda, & El Kammah.1985: *H. (A.) atherurus*; Hoogstraal & Kim.*Haemaphysalis bancrofti*. Nuttall & Warburton, 1915.

Ticks, A Monograph of the Ixodoidea, part III: 487-490.

1905: *H. leachi australis* (misidentification); Neumann.1915: *H. bancrofti*; original description.1963: *H. bancrofti*; Roberts.1981: *H. (Kaiserianna) bancrofti*; Keirans & Brewster.1984: *H. bancrofti*; Keirans.1985: *H. (K.) bancrofti*; Hoogstraal & Kim.*Haemaphysalis bandicota* Hoogstraal & Kohls, 1965.

J. Parasit., 51(3): 460-466.

1965: *H. bandicota*; original description.1973: *H. (Ornithophysalis) bandicota*; Hoogstraal & Wassef.1985: *H. (O.) bandicota*; Hoogstraal & Kim.*Haemaphysalis bartelsi* Schulze, 1938.

Z. Morph. Okol. Tiere, 34(1): 140.

1934: *H. koningsbergeri* Warburton & Nuttall (misidentification); Schulze. This author mentioned two forms of this species, one larger and darker (*H. koningsbergeri*, as currently recognized) and one smaller and lighter (*H. bartelsi*, as currently recognized).1938: *H. bartelsi*; original description.1950: *H. koningsbergeri* Warburton & Nuttall; Anastos (as synonym of).1968: *H. (Rhipistoma) bartelsi*; Wilson, Hoogstraal, & Kohls.1972: *H. (R.) bartelsi*; Hoogstraal, Gaber, Van Peenen, Duncan, & Kadarsan.1985: *H. (R.) bartelsi*; Hoogstraal & Kim.*Haemaphysalis beneditoi* Gil Collado, 1938.

Brotéria, 7(3): 103-106.

See notes under the item *H. sulcata*.*Haemaphysalis bequaerti* Hoogstraal, 1956.

J. Parasit., 42(2): 156-161.

1956: *H. bequaerti*; original description.  
 1971: *H. (Rhipistoma) bequaerti*; Hoogstraal, Walker, & Neitz.  
 1985: *H. (R.) bequaerti*; Hoogstraal & Kim.  
 1987: *H. bequaerti*; Matthysse & Colbo.

***Haemaphysalis birmaniae*** Supino, 1897.  
*Atti Soc. Ven-Trent. Sc. Nat. Padova*, 3(1): 236-237.  
 1897: *H. birmaniae*; original description.  
 1897: *H. birmaniae*; Neumann.  
 1911: *H. hystricis* Supino (misidentification); Neumann.  
 1911: *H. bispinosa* Neumann (misidentification); Neumann.  
 1965: *H. birmaniae*; Hoogstraal, Trapido & Kohls.  
 1985: *H. (Haemaphysalis) birmaniae*; Hoogstraal & Kim.

***Haemaphysalis bispinosa*** Neumann, 1897.  
*Mém. Soc. Zool. Fr.*, 10(3-4).  
 1897: *H. bispinosa*; original description.  
 1902: *H. hystricis* Supino (misidentification); Neumann.  
 1940: *H. bispinosa neumanni*; Pospelova-Shtrom.  
 1966: *H. neumanni bispinosa*; Abramov & Laptev.  
 1966: *H. (Kaiseriana) bispinosa*; Hoogstraal & Trapido.  
 1970: *H. (K.) bispinosa*; Dhanda, Hoogstraal, & Bhat.  
 1985: *H. (K.) bispinosa*; Hoogstraal & Kim.

***Haemaphysalis bispinosa intermedia*** Warburton & Nuttall, 1909.  
*Parasitology*, 2(1-2): 69-70.  
 See notes under the item *H. intermedia*.

***Haemaphysalis bispinosa neumanni*** Donitz, 1905.  
*Sber. Ges. Natur. Freunde Berl.*, 4: 127-130.  
 See notes under the item *H. bispinosa*.

***Haemaphysalis borneata*** Hoogstraal, 1971.  
*J. Parasit.*, 57(5): 1096-1098.  
 1971: *H. (Kaiseriana) borneata*; original description.  
 1985: *H. (K.) borneata*; Hoogstraal & Kim.

***Haemaphysalis bremneri*** Roberts, 1963.  
*Aust. J. Zool.*, 11(1): 49-53.  
 1963: *H. bremneri*; original description.  
 1973: *H. (Ornithophysalis) bremneri*; Hoogstraal & Wassef.  
 1985: *H. (O.) bremneri*; Hoogstraal & Kim.

***Haemaphysalis calcarata*** Neumann, 1902.  
*Arch. Parasit.*, 6(1): 113-115.  
 1902: *H. calcarata*; original description.  
 1915: *H. calcarata*; Nuttall & Warburton.  
 1955b: *H. calcarata*; Hoogstraal.  
 1965: *H. (Rhipistoma) calcarata*; Hoogstraal, Kohls, & Trapido.  
 1984: *H. calcarata*; Keirans.  
 1987: *H. calcarata*; Matthysse & Colbo.

***Haemaphysalis calcarata houyi*** Nuttall & Warburton, 1915.  
*Ticks. A Monograph of Ixodoidea, Part III*, p: 444.  
 See notes under the item *H. houyi*.

***Haemaphysalis calva*** Nuttall & Warburton, 1915.  
*Ticks. A Monograph of Ixodoidea, part III*: 445-447.  
 1915: *H. calvus*; original description.  
 1981: *H. (Garnhamphysalis) calvus*; Hoogstraal & Wassef.  
 1981: *H. (G.) calvus*; Keirans & Brewster.  
 1983a: *H. (G.) calvus*; Hoogstraal & Wassef.  
 1984: *H. calvus*; Keirans.

1985: *H. (G.) calva*; Hoogstraal & Kim.

*Haemaphysalis campanulata* Warburton, 1908.

Proc. Camb. Phil. Soc., 14(5): 508-514.

1908: *H. campanulata*; original description.

1932: *H. campanulata hoeppiana*; Schulze (as new subspecies).

1985: *H. (Haemaphysalis) campanulata*; Hoogstraal & Kim.

*Haemaphysalis campanulata hispanica* Gil Collado, 1938.

Brotéria, 7(3): 106-108.

See notes under the item *H. hispanica*.

*Haemaphysalis campanulata hoeppiana* Schulze, 1932.

Sber. Abh. Naturf. Ges. Rostock, 3: 59-61.

See notes under the item *H. campanulata*.

*Haemaphysalis canestrinii* (Supino, 1897).

Atti Soc. Ven-Trent. Sci. Nat. Padova, 3(1): 237.

1897: *Opisthodon canestrinii*; original description.

1897: *Haemaphysalis canestrinii*; Neumann.

1902: *H. leachii* (Audouin); Neumann (as synonym of).

1911: *H. leachii*; Neumann (as synonym of).

1915: *H. leachi*; Nuttall & Warburton (as synonym of).

1966: *H. leachii*; Hoogstraal & Trapido (as synonym of).

1971b: *H. (Rhipistoma) canestrinii*; Hoogstraal.

1985: *H. (R.) canestrinii*; Hoogstraal & Kim.

*Haemaphysalis capricornis* Hoogstraal, 1966.

J. Parasit., 52(4): 783-786.

1966: *H. (Haemaphysalis) capricornis*; original description.

1971: *H. (Aborphysalis) capricornis*; Hoogstraal, Dhanda, & El Kammah.

1985: *H. (A.) capricornis*; Hoogstraal & Kim.

*Haemaphysalis caucasica* Olenev, 1928.

Dokl. Akad. Nauk SSSR, s. A(2): 29-32.

1928: *H. caucasica*; original description.

1970: *H. (Rhipistoma) caucasica*; Hoogstraal & Morel.

1985: *H. (R.) caucasica*; Hoogstraal & Kim.

*Haemaphysalis celebensis* Hoogstraal, Trapido, & Kohls, 1965.

J. Parasit., 51(6): 1001-1003.

1915: *H. hystricis* Supino (misidentification); Nuttall & Warburton.

1965: *H. (Kaiseriana) celebensis*; original description.

1984: *H. celebensis*; Keirans.

1985: *H. (K.) celebensis*; Hoogstraal & Kim.

*Haemaphysalis centropi* Kohls, 1949.

J. Parasit., 35(4): 388-390.

See notes under the item *H. doenitzii*.

*Haemaphysalis cholodkovskyi* Olenev, 1928.

Nastav. Sobiran Zool. Kolleks., 16: 84-96.

See notes under the item *H. sulcata*.

*Haemaphysalis choprai* Sharif, 1928.

Rec. Indian Mus., 30(3): 269-270.

1928: *H. choprai*; original description.

*Haemaphysalis chordeilis* (Packard, 1869).

I Rep. Peabody Acad. Sci., Jan.: 67.

1869: *Ixodes chordeilis*; original description.

1905: *Haemaphysalis punctata cinnabarina*; Neumann (as new subspecies).

1907: *H. chordeilis*; Banks.

- 1915: *H. cinnabarina* (misidentification); Nuttall & Warburton (see Furman & Loomis for additional notes).  
 1915: *H. chordeilis*; Nuttall & Warburton (see Keirans).  
 1984: *H. chordeilis*; Furman & Loomis.  
 1984: *H. chordeilis*; Keirans.  
 1985: *H. (Aboimialis) chordeilis*; Hoogstraal & Kim.

***Haemaphysalis cinnabarina*** Koch, 1844.  
*Arch. Naturgesch.*, 10(1): 237.  
 1844: *H. cinnabarina*; original description.  
 1844: *H. sanguinolenta*; Koch (the taxon *cinnabarina* has page priority over *sanguinolenta*).  
 1973: *H. (Aboimialis) cinnabarina*; Hoogstraal.  
 1985: *H. (A.) cinnabarina*; Hoogstraal & Kim.

***Haemaphysalis cinnabarina cretica*** Sénévet & Caminopetros, 1936.  
*Arch. Inst. Pasteur Algér.*, 14(1): 25.  
 See notes under the item *H. sulcata*.

***Haemaphysalis cinnabarina punctata*** Nuttall & Warburton, 1915.  
*Ticks, A Monograph of the Ixodoidea*, part III.  
 See notes under the item *H. punctata*.

***Haemaphysalis cinnabarina punctata autumnalis*** Schulze, 1918.  
*Sber. Ges. Naturf. Freunde Berl.*, 1-2: 61-64.  
 See notes under the item *H. punctata*.

***Haemaphysalis cinnabarina punctata longicornis*** Oswald, 1937.  
*Jugoslav. Vet. Glasn.*, 17(7): 265-273.  
 See notes under the item *H. sulcata*.

***Haemaphysalis cinnabarina punctata musimonis*** Tonelli-Rondelli, 1930.  
*Atti Soc. Ital. Sci. Nat.*, 69(2): 116-117.  
 See notes under the item *H. sulcata*.

***Haemaphysalis cinnabarina punctata perdentata*** Schulze, 1918.  
*Sber. Ges. Naturf. Freunde Berl.*, 1-2: 61-64.  
 See notes under the item *H. punctata*.

***Haemaphysalis cinnabarina punctata recta*** Oswald, 1939.  
*Parasitology*, 31(3): 272-274.  
 See notes under the item *H. punctata*.

***Haemaphysalis concinna*** Koch, 1844.  
*Arch. Naturgesch.*, 10(1): 237-238.  
 1844: *H. concinna*; original description.  
 1877: *H. hirudo*; Koch (it is a "nomen incertum", see Morel, 1963).  
 1911: *H. concinna hirudo*; Gedoelst (as new subspecies)  
 1911: *H. concinna concinna*; Gedoelst.  
 1915: *H. concinna*; Nuttall & Warburton.  
 1977: *H. concinna*; Bolotin.  
 1984: *H. concinna*; Keirans.  
 1985: *H. (Haemaphysalis) concinna*; Hoogstraal & Kim.

***Haemaphysalis concinna hirudo*** Gedoelst, 1911.  
*Synopsis de Parasitologie*, p. 151.  
 See notes under the item *H. concinna*.

***Haemaphysalis concinna kochi*** Neumann, 1905.

Arch. Parasit., 9(2): 239.

See notes under the item *H. flava*.***Haemaphysalis concinna longicornis*** Neumann, 1905.

Arch. parasit., 9(2): 237.

See notes under the item *H. longicornis*.***Haemaphysalis cooleyi*** Bedford, 1929.

15 Rep. Dir. Vet. Serv. Un. S. Afr. 1: 494-495.

1929: *H. cooleyi*; original description.1956: *H. cooleyi*; Hoogstraal.1971: *H. (Rhipistoma) cooleyi*; Hoogstraal, Walker, & Neitz.1981: *H. (R.) cooleyi*; Hoogstral & Wassef.1985: *H. (R.) cooleyi*; Hoogstraal & Kim.***Haemaphysalis cornigera*** Neumann, 1897.

Mém. Soc. Zool. Fr., 10(3-4): 350-352.

1897: *H. cornigera*; original description.1909: *H. spiniceps*; Warburton & Nuttall (as new species)1915: *H. spiniceps*; Nuttall & Warburton.1915: *H. cornigera*; Nuttall & Warburton.1915: *H. proxima*; Nuttall & Warburton (as new species)1963: *H. (Hoogstraaliter) cornigera*; Santos Dias.1965: *H. cornigera*; Trapido.1965: *H. (Kaiserianna) cornigera*; Hoogstraal, Trapido, & Kohls.1984: *H. cornigera*; Keirans.1985: *H. (K.) cornigera*; Hoogstraal & Kim.***Haemaphysalis cornigera anomala*** Warburton, 1913.

Parasitology, 6(2): 121-128.

See notes under the item *H. anomala*.***Haemaphysalis cornupunctata*** Hoogstraal & Varma, 1962.

J. Parasit., 48(2): 185-187.

1962: *H. cornupunctata*; original description.1973: *H. (Aboimialis) cornupunctata*; Hoogstraal.1985: *H. (A.) cornupunctata*; Hoogstraal & Kim.***Haemaphysalis cuspidata*** Warburton, 1910.

Parasitology, 3(4): 401-402.

1910: *H. cuspidata*; original description.1915: *H. cuspidata*; Nuttall & Warburton.1965: *H. cuspidata*; Trapido.1984: *H. cuspidata*; Keirans.***Haemaphysalis danieli*** Cerny & Hoogstraal, 1977.

J. Parasit., 63(3): 567-574.

1977: *H. (Allophysalis) danieli*; original description.1985: *H. (A.) danieli*; Hoogstraal & Kim.***Haemaphysalis darjeeling*** Hoogstraal & Dhanda, 1970.

J. Parasit., 56(1): 169-174.

1970: *H. (Haemaphysalis) darjeeling*; original description.1985: *H. (H.) darjeeling*; Hoogstraal & Kim.***Haemaphysalis davisi*** Hoogstraal, Dhanda, & Bhat, 1970.

J. Parasit., 56(3): 588-595.

1964: *H. neumanni* (misidentification); Dhanda & Rao (see Hoogstraal, Dhanda & Bhat, 1970).1970: *H. (Kaiseriana) davisi*; original description.1985: *H. (K.) davisi*; Hoogstraal & Kim.

***Haemaphysalis demidovae* Emel'yanova, 1981.**

Parazitol., 34(2): 106-112.

1981: *H. (Allophysalis) demidovae*; original description.1985: *H. (A.) demidovae*; Hoogstraal & Kim.***Haemaphysalis dentipalpis* Warburton & Nuttall, 1909.**

Parasitology, 2(1-2): 67-68.

See notes under the item *H. asiatica*.***Haemaphysalis doenitzi* Warburton & Nuttall, 1909.**

Parasitology, 2(1-2): 64-65.

1909: *H. doenitzi*; original description.1915: *H. doenitzi*; Nuttall & Warburton.1944: *H. doenitzi*; Toumanoff.1949: *H. centropi*; Kohls (as new species).1958: *H. weidneri*; Santos Dias (as new species)1973: *H. pavlovskyi* Pospelova-Shtrom; Hoogstraal & Wassef (as synonym of *H. doenitzi*).1973: *H. (Ornithophysalis) doenitzi*; Hoogstraal & Wassef.***Haemaphysalis elongata* Neumann, 1897.**

Mém. Soc. Zool. Fr., 10(3-4): 354-356.

1897: *H. elongata*; original description.1915: *H. elongata*; Nuttall & Warburton.1953: *H. elongata*; Hoogstraal.1961: *H. elongata*; Brygoo.1964: *H. elongata*; Rageau.1974: *H. (Elongiphysalis) elongata*; Hoogstraal, Wassef, & Uilenberg.1979: *H. (E.) elongata*; Hoogstraal, Uilenberg, & Klein.1984: *H. elongata*; Keirans.1985: *H. (E.) elongata*; Hoogstraal & Kim.***Haemaphysalis erinacei erinacei* Pavesi, 1884.**

Ann. Mus. Civ. Stor. Nat. Genova, 20: 484.

1884: *H. erinacei*; original description.1897: *H. leachi* (Audouin, 1827) (in part); Neumann.1905: *H. numidiana*; Neumann (as new species)1915: *H. numidiana*; Nuttall & Warburton.1951: *H. erinacei*; Feldman-Muhsam (as new species).1953: *H. erinacei erinacei*; Feldman-Muhsam.1955a: *H. erinacei*; Hoogstraal.1965: *H. (Rhipistoma) erinacei*; Hoogstraal, Kohls, & Trapido.1984: *H. erinacei*; Keirans.1985: *H. (R.) erinacei*; Hoogstraal & Kim.***Haemaphysalis erinacei ornata* Feldman-Muhsam, 1956.**

Bull. Res. Counc. Israel, Sect. B: Biology and Geology, 5B(3-4): 298-299.

1956: *H. taurica ornata*; original description.1965: *H. (Rhipistoma) erinacei ornata*; Hoogstraal, Kohls, & Trapido.1985: *H. (R.) erinacei ornata*; Hoogstraal & Kim.***Haemaphysalis erinacei taurica* Pospelova-Shtrom, 1940.**

Parazit. Sborn. Zool. Inst. Akad. Nauk SSSR (1939), 7: 71, 91, 95-98.

1939: *H. numidiana taurica*; original description.1953: *H. taurica*; Feldman-Muhsam (as full species).1955a: *H. erinacei taurica*; Hoogstraal.1965: *H. (Rhipistoma) erinacei taurica*; Hoogstraal, Kohls, & Trapido.1985: *H. (R.) erinacei taurica*; Hoogstraal & Kim.***Haemaphysalis erinacei turanica* Pospelova-Shtrom, 1940.**

Parazit. Sborn. Zool. Inst. Akad. Nauk SSSR (1939), 7: 71, 89-91, 95-96.

1939: *H. numidiana turanica*; original description.1953: *H. erinacei turanica*; Feldman-Muhsam.1955a: *H. erinacei turanica*; Hoogstraal.

1965: *H. (Rhipistoma) erinacei taurica*; Hoogstraal, Kohls, & Trapido.  
 1985: *H. (R.) erinacei taurica*; Hoogstraal & Kim.

***Haemaphysalis ethiopica*** Santos Dias, 1958.  
*Mozambique*, 88: 93-98.  
 See notes under the *H. spinulosa*.

***Haemaphysalis eupleres*** Hoogstraal, Kohls, & Trapido, 1965.  
*J. Parasit.*, 51(6): 997-999.  
 1965: *H. (Rhipistoma) eupleres*; original description.  
 1977: *H. (R.) eupleres*; Hoogstraal & Camicas.  
 1985: *H. (R.) eupleres*; Hoogstraal & Kim.

***Haemaphysalis filippovae*** Bolotin, 1979.  
*Zool. Zh.*, 58(2): 267-269.  
 1979: *H. filippovae*; original description.  
 1985: *H. (Haemaphysalis) filippovae*; Hoogstraal & Kim.

***Haemaphysalis flava*** Neumann, 1897.  
*Mém. Soc. Zool. Fr.*, 10(3-4): 333-336.  
 1897: *H. flava*; original description.  
 1897: *H. hirudo*; Neumann (as new species).  
 1905: *H. flava armata*; Neumann (as new subspecies).  
 1905: *H. flava flava*; Neumann.  
 1908: *H. flava*; Warburton.  
 1915: *H. flava*; Nuttall & Warburton.  
 1915: *H. campanulata* Warburton (misidentification); Nuttall & Warburton.  
 1968: *H. (Haemaphysalis) flava*; Dhanda & Bhat.  
 1984: *H. flava*; Keirans.  
 1985: *H. (Haemaphysalis) flava*; Hoogstraal & Kim.

***Haemaphysalis flava armata*** Neumann, 1905.  
*Arch. Parasit.*, 9(2): 238.  
 See notes under the item *H. flava*.

***Haemaphysalis formosensis*** Neumann, 1913.  
*Ent. Mitt. Supp. Ent.*, 2: 135-137.  
 1913: *H. formosensis*; original description.  
 1915: *H. warburtoni* Nuttall (misidentification); Nuttall & Warburton.  
 1966: *H. formosensis*; Hoogstraal.  
 1971: *H. (Aborphysalis) formosensis*; Hoogstraal, Dhanda, & El Kammah.  
 1985: *H. (A.) formosensis*; Hoogstraal & Kim.

***Haemaphysalis fossae*** Hoogstraal, 1953.  
*Bull. Mus. Comp. Zool. Harv.*, 111(2): 83-89.  
 1953: *H. fossae*; original description.  
 1965: *H. (Rhipistoma) fossae*; Hoogstraal, Kohls, & Trapido.  
 1979: *H. (R.) fossae*; Hoogstraal, Uilenberg, & Klein.  
 1985: *H. (R.) fossae*; Hoogstraal & Kim.

***Haemaphysalis garhwaleensis*** Dhanda & Bhat, 1968.  
*J. Parasit.*, 54(1): 674-678.  
 1968: *H. (Allophysalis) garhwaleensis*; original description.  
 1985: *H. (A.) garhwaleensis*; Hoogstraal & Kim.

***Haemaphysalis genevrayi*** Toumanoff, 1944.  
*Les Tiques de l'Indochine*, p: 73-74.  
 See notes under the item *H. hystricis*.

***Haemaphysalis gestroi*** Supino, 1897.  
*Nuovi Ixodes della Birmania*, p: 37-38.  
 See notes under the item *H. asiatica*.

***Haemaphysalis goral*** Hoogstraal, 1970.

J. Parasit., 56(6): 1235-1237.  
 1915: *H. bispinosa* (misidentification); Nuttall & Warburton.  
 1970: *H. (Haemaphysalis) goral*; original description.  
 1984: *H. goral*; Keirans.  
 1985: *H. (H.) goral*; Hoogstraal & Kim.

***Haemaphysalis heinrichi*** Schulze, 1939. Z. Parasitenk., 10(6): 726-728.  
 1939: *H. heinrichi*; original description.  
 1968: *H. (Rhipistoma) heinrichi*; Hoogstral & Kohls.  
 1985: *H. (R.) heinrichi*; Hoogstraal & Kim.

***Haemaphysalis himalaya*** Hoogstraal, 1966.

J. Parasit., 52(4): 805-809.  
 1966: *H. (Herpetobia) himalaya*; original description.  
 1985: "H. (H.) himalaya is probably a junior synonym of H. (H.) sundrai";  
 Hoogstraal & Kim.

***Haemaphysalis hirsuta*** Hoogstraal, Trapido, & Kohls, 1966.

J. Parasit., 52(1): 176-180.  
 1950: *H. papuana* Thorell (misidentification); Anastos.  
 1966: *H. (Kaisericana) hirsuta*; original description.  
 1983: *H. (Segalia) hirsuta*; Hoogstraal (date of publication after Hoogstraal & Kim; however, this reference was not included in the bibliography of the Hoogstraal & Kim's revision nor in the compilation by Keirans; I was unable to find the paper).  
 1985: *H. (S.) hirsuta*; Hoogstraal & Kim.

***Haemaphysalis hirudo*** Koch, 1877.

Verh. K.-K. Zool. Bot. Ges. Wien (1877) p: 786.  
 It is a "nomen incertum" (see Morel, 1963).

***Haemaphysalis hirudo*** Neumann, 1897.

Mém. Soc. Zool. Fr., 10(3-4): 341.  
 See notes under the item *H. flava*.

***Haemaphysalis hispanica*** Gil Collado, 1938.

Brotéria, 7(3): 106-108.  
 1938: *H. campanulata hispanica*; original description.  
 1948: *H. hispanica*; Gil Collado (as full species).  
 1965: *H. (Rhipistoma) hispanica*; Hoogstraal et al.  
 1970: *H. (R.) hispanica*; Hoogstraal & Morel.  
 1985: *H. (R.) hispanica*; Hoogstraal & Kim.

***Haemaphysalis hoodi*** Warburton & Nuttall, 1909.

Parasitology, 2(1-2): 62-63.  
 1909: *H. hoodi*; original description.  
 1909: *H. africana*; Howard (as new species).  
 1915: *H. hoodi*; Nuttall & Warburton.  
 1947: *H. hoodi*; Tendeiro.  
 1948: *H. hoodi hoodi*; Colas-Belcour & Millot (as subspecies, when described *H. hoodi madagascariensis*, currently recognized as *H. madagascariensis*).  
 1952: *H. hoodi hoodi*; Santos Dias.  
 1956: *H. hoodi hoodi*; Hoogstraal.  
 1973: *H. (Ornithophysalis) hoodi*; Hoogstraal & Wassef.  
 1985: *H. (O.) hoodi*; Hoogstraal & Kim.  
 1987: *H. hoodi*; Matthysse & Colbo.

***Haemaphysalis hoodi madagascariensis*** Colas-Belcour & Millot, 1948.

Bull. Soc. Path. Exot., 41(5-6).

See notes under the item *H. madagascariensis*.

***Haemaphysalis hoodi orientalis*** Nuttall & Warburton, 1915.

Ticks. A Monograph of Ixodoidea, part III, p: 486.  
See notes under the item *H. orientalis*.

***Haemaphysalis hoogstraali*** Kohls, 1950.  
Nat. Inst. Hlth. Bull., 192: 9-11.  
1950: *H. hoogstraali*; original description.

***Haemaphysalis houyi*** Nuttall & Warburton, 1915. Ticks.  
A Monograph of Ixodoidea, Part III, p: 444.  
1910: *H. calcarata* Neumann (misidentification); Neumann.  
1915: *H. calcarata houyi*; original description.  
1951: *H. calcarata houyi*; Rousset.  
1953: *H. calcarata houyi*; Rousset.  
1955b: *H. houyi*: Hoogstraal (as full species).  
1956: *H. houyi*; Hoogstraal.  
1965: *H. (Rhipistoma) houyi*; Hoogstraal, Kohls, & Trapido.  
1984: *H. houyi*; Keirans.  
1987: *H. houyi*; Matthysse & Colbo.

***Haemaphysalis howletti*** Warburton, 1913.  
Parasitology, 6(2): 123-124.  
1913: *H. howletti*; original description.  
1915: *H. howletti*; Nuttall & Warburton.  
1973: *H. (Ornithophysalis) howletti*; Hoogstraal & Wassef.  
1984: *H. howletti*; Keirans.  
1985: *H. (O.) howletti*; Hoogstraal & Kim.

***Haemaphysalis humerosa*** Warburton & Nuttall, 1909.  
Parasitology, 2(1-2): 60-61.  
1909: *H. humerosa*; original description.  
1915: *H. humerosa*; Nuttall & Warburton.  
1946: *H. humerosa*; Taylor.  
1963: *H. humerosa*; Roberts.  
1973: *H. (Ornithophysalis) humerosa*; Hoogstraal & Wassef.  
1984: *H. humerosa*; Keirans.  
1985: *H. (O.) humerosa*; Hoogstraal & Kim.

***Haemaphysalis hylobatis*** Schulze, 1933.  
Arch. Hydrobiol., Suppl. 12: 490-492.  
1933: *H. hylobatis*; original description.  
1985: *H. (Kaiseriana) hylobatis*; Hoogstraal & Kim.

***Haemaphysalis hyracophila*** Hoogstraal, Walker & Neitz, 1971.  
J. Parasit., 57(2): 417-425.  
1971: *H. (Rhipistoma) hyracophila*; original description.  
1985: *H. (R.) hyracophila*; Hoogstraal & Kim.

***Haemaphysalis hystricis*** Supino, 1897.  
Atti Soc. Ven.-Trent. Sci. Nat. Padova, 3(1): 237.  
1897: *H. hystricis*; original description.  
1897: *H. hystricis*; Neumann.  
1908: *H. hystricis*; Warburton.  
1935: *H. nishiyamai*; Sugimoto (as new species).  
1937: *H. nishiyamai*; Sugimoto.  
1937: *H. iwasakii*; Sugimoto (as new species).  
1941: *H. trispinosa*; Toumanoff (as new species).  
1944: *H. trispinosa*; Toumanoff.  
1944: *H. genevrayi*; Toumanoff (as new species).  
1965: *H. (Kaiseriana) hystricis*; Hoogstraal, Trapido, & Kohls.  
1985: *H. (K.) hystricis*; Hoogstraal & Kim.

***Haemaphysalis ias*** Kishida, 1936.  
Rep. Gov. Exp. Stn. Anim. Hyg., Tokyo, 17: 133-135.  
1936: *H. ias*; original description.

1985: *H. (Kaiseriana) ias*; Hoogstraal & Kim.

***Haemaphysalis indica*** Warburton, 1910.  
*Parasitology*, 3: 395-407.  
 1910: *H. leachi indica*; original description.  
 1915: *H. leachi indica*; Nuttall & Warburton.  
 1956: *H. leachii muhsami* Santos Dias; Hoogstraal (as synonym of).  
 1958: *H. indica*; Santos Dias.  
 1964: *H. leachii indica*; Hoogstraal.  
 1964: *H. leachi* sp. 1: Trapido et al.  
 1970: *H. (Rhipistoma) indica*; Hoogstraal.  
 1984: *H. indica*; Keirans.  
 1985: *H. (R.) indica*; Hoogstraal & Kim.

***Haemaphysalis indoflava*** Dhanda & Bhat, 1968.  
*J. Parasit.*, 54(5): 1063-1067.  
 1928: *H. flava* Neumann (misidentification); Sharif.  
 1968: *H. (Haemaphysalis) indoflava*; original description.  
 1985: *H. (H.) indoflava*; Hoogstraal & Kim.

***Haemaphysalis inermis*** Birula, 1895.  
*Izv. Imp. Akad. Nauk s. 5, v. 2(4)*: 360-361.  
 1895: *H. inermis*; original description.  
 1901: *H. ambigua*; Neumann (as new species).  
 1915: *H. inermis*; Nuttall & Warburton.  
 1918: *Alloceraea inermis*; Schulze.  
 1969: *H. (Alloceraea) inermis*; Hoogstraal.  
 1984: *H. inermis*; Keirans.  
 1985: *H. (A.) inermis*; Hoogstraal & Kim.

***Haemaphysalis inermis aponommooides*** Warburton, 1913.  
*Parasitology*, 6(2): 128-129.  
 See notes under the item *H. aponommooides*.

***Haemaphysalis intermedia*** Warburton & Nuttall, 1909.  
*Parasitology*, 2(1-2): 69-70.  
 1909: *H. bispinosa intermedia*; original description.  
 1915: *H. bispinosa intermedia*; Nuttall & Warburton.  
 1915: *H. kutchensis* Hoogstraal & Trapido (misidentification); Nuttall & Warburton (see Hoogstraal & Trapido, 1963).  
 1915: *H. paraturturis* Hoogstraal, Trapido, & Rebello (misidentification); Nuttall & Warburton (see Hoogstraal & Trapido, 1963).  
 1915: *H. bispinosa* Neumann (misidentification); Nuttall & Warburton (see Hoogstraal & Trapido, 1963).  
 1918: *H. otophila*; Schulze (as new species; see Morel, 1963).  
 1926: *H. otophila schulzei*; Tonelli-Rondelli (as new subspecies).  
 1928: *H. paraturturis* Hoogstraal, Trapido, & Rebello (misidentification); Sharif.  
 1962: *H. intermedia* Warburton & Nuttall; Ali.  
 1963: *H. intermedia* (new combination); Trapido & Hoogstraal. *H. bispinosa intermedia*, described by Warburton & Nuttall from specimens from Ceylon (Sri Lanka) and India, was supported by a brief description, differentiating this form from *H. bispinosa* Neumann and *H. campanulata* Warburton. The illustration is clearly recognizable as a female of *H. parva* Neumann, 1908. *H. bispinosa intermedia* would be a synonym of *H. parva* Neumann, 1908, but Morel (1963) has found the name *H. parva* Neumann, 1908, to be preoccupied by *Dermacentor parvus* Neumann, 1897, which is actually a male of the species subsequently named *H. otophila* Schulze, 1918. Thus, *H. otophila* has been replaced by *H. parva* (Neumann, 1897) and *H. parva* Neumann, 1908 is a name no longer available. The next available name for *H. parva* Neumann, 1908 is *H. intermedia* Warburton & Nuttall, 1909, new combination (Paragraph excerpted from Trapido & Hoogstraal, 1963).  
 1963: *H. intermedia*; Morel.  
 1963: *H. intermedia*; Hoogstraal & Trapido.

1971c: *H. (Haemaphysalis) intermedia*; Hoogstraal.  
 1984: *H. intermedia*; Keirans.

***Haemaphysalis iwasakii*** Sugimoto, 1937.  
*J. Cent. Soc., Vet. Med., Tokyo*, 50: 303-340.  
 See notes under the item *H. hystricis*.

***Haemaphysalis japonica*** Warburton, 1908.  
*Proc. Camb. Phil. Soc.*, 14(5): 512-513.  
 1908: *H. japonica*; original description.  
 1915: *H. japonica*; Nuttall & Warburton.  
 1981: *H. (Haemaphysalis) japonica*; Keirans & Brewster.  
 1984: *H. japonica*; Keirans.  
 1985: *H. (H.) japonica*; Hoogstraal & Kim.

***Haemaphysalis japonica douglasi*** Nuttall & Warburton,  
 1915.  
 Ticks. A Monograph of Ixodoidea, part III: 403.  
 1915: *H. japonica douglasi*; original description.  
 1981: *H. (Haemaphysalis) japonica douglasi*; Keirans & Brewster.  
 1984: *H. japonica douglasi*; Keirans.  
 1985: *H. (H.) japonica douglasi*; Hoogstraal & Kim.

***Haemaphysalis juxtakochi*** Cooley, 1946.  
*Nat. Inst. Hlth. Bull.*, 187: 48-51.  
 1908: *H. kochi*; Aragão (as new rank of *H. concinna kochi*, working with specimens of the species later named *H. juxtakochi* Cooley; *H. c. kochi* is currently considered a synonym of *H. flava* Neumann).  
 1946: *H. juxtakochi*; original description.  
 1951: *H. kohlsi*; Aragão (as new species).  
 1984: *H. kuxtakochi*; Keirans.  
 1985: *H. (G.) juxtakochi*; Hoogstraal & Kim.

***Haemaphysalis kadarsani*** Hoogstraal & Wassef, 1977.  
*J. Parasit.*, 63(6): 1103-1109.  
 1977: *H. (Ornithophysalis) kadarsani*; original description.  
 1985: *H. (O.) kadarsani*; Hoogstraal & Kim.

***Haemaphysalis kashmirensis*** Hoogstraal & Varma, 1962.  
*J. Parasit.*, 48(2): 188-191.  
 1962: *H. kashmirensis*; original description.  
 1965: *H. (Herpetobia) kashmirensis*; Hoogstraal & McCarthy.  
 1985: *H. (H.) kashmirensis*; Hoogstraal & Kim.

***Haemaphysalis kinneeari*** Warburton, 1913.  
*Parasitology*, 19: 121-130.  
 1913: *H. kinneeari*; original description.  
 1915: *H. kinneeari*; Nuttall & Warburton.  
 1944: *H. papuana* Thorell (misidentification); Toumanoff.  
 1964: *H. papuana kinneeari*; Trapido, Hoogstraal & Varma.  
 1965: *H. (Kaiseriana) papuana kinneeari*; Hoogstraal, Trapido, & Kohls.  
 1968: *H. (K.) papuana kinneeari*; Hoogstraal, Kohls, & Parrish.  
 1985: *H. (K.) kinneeari*; Hoogstraal & Kim (as full species).

***Haemaphysalis kitaokai*** Hoogstraal, 1969.  
*J. Parasit.*, 55(1): 211-221.  
 1906: *H. inermis* Birula (misidentification); Neumann.  
 1915: *H. inermis* (misidentification); Nuttall & Warburton.  
 1915: *H. inermis aponommoides* Warburton (misidentification); Nuttall & Warburton.  
 1937: *H. inermis* (misidentification); Sugimoto.  
 1957: *H. inermis* (misidentification); Keegan & Toshioka.  
 1966: *H. ambigua* Neumann (=*H. inermis*) (misidentification); Hoogstraal & Wilson.

1967: *H. ambigua* (misidentification); Kitaoka & Morii.  
 1969: *H. (Alloceraea) kitaokai*; original description.  
 1985: *H. (A.) kitaokai*; Hoogstraal & Kim.

***Haemaphysalis kochi*** Aragão, 1908.  
 Brazil-Med., 22(12): 111-112.  
 See notes under the item *H. juxtakochi*.

***Haemaphysalis kohlsi*** Aragão & Fonseca, 1951.  
 Mem. Inst. Oswaldo Cruz, 49: 574.  
 See notes under the item *H. juxtakochi*.

***Haemaphysalis koningsbergeri*** Warburton & Nuttall, 1909.  
*Parasitology*, 2(1-2): 65-66.  
 1909: *H. koningsbergeri*; original description.  
 1915: *H. koningsbergeri*; Nuttall & Warburton.  
 1915: *H. leachi* (Audouin) (misidentification); Nuttall & Warburton.  
 1932: *H. leachi koningsbergeri*; Krijgsman & Ponto.  
 1965: *H. (Rhipistoma) koningsbergeri*; Hoogstraal, Kohls, & Trapido.  
 1981: *H. (R.) koningsbergeri*; Keirans & Brewster.  
 1984: *H. koningsbergeri*; Keirans.  
 1985: *H. (R.) koningsbergeri*; Hoogstraal & Kim.

***Haemaphysalis kopetdhagica*** Kerbabaev, 1962.  
*Izv. Akad. Nauk Turkmen SSR, s. Biol. Nauk* (1): 77-80.  
 1962: *H. warburtoni kopet-daghicus*; original description.  
 1965: *H. (Allophysalis) kopetdaghiclus*; Hoogstraal.  
 1985: *H. (A.) kopetdaghica*; Hoogstraal & Kim.

***Haemaphysalis kriggsmani*** Kohls, 1948.  
*J. Parasit.*, 34(2): 157.  
 1932: *H. novae-guineae*; original description of Krijgsman & Ponto, 1932  
 (preoccupied by *H. novae-guineae* Hirst).  
 1948: *H. kriggsmani* (new name); Kohls.

***Haemaphysalis kutchensis*** Hoogstraal & Trapido, 1963.  
*J. Parasit.*, 49(3): 489-497.  
 1915: *H. bispinosa intermedia* Warburton & Nuttall (misidentification); Nuttall & Warburton.  
 1963: *H. kutchensis*; original description.  
 1971c: *H. (H.) kutchensis*; Hoogstraal  
 1984: *H. kutchensis*; Keirans.

***Haemaphysalis kyasanurensis*** Trapido, Hoogstraal &  
 Rajagopalan, 1964.  
*J. Parasit.*, 50(2): 295-301.  
 1964: *H. kyasanurensis*; original description.  
 1971: *H. (Aborphysalis) kyasanurensis*; Hoogstraal, Dhanda, & El Kammah.  
 1985: *H. (A.) kyasanurensis*; Hoogstraal & Kim.

***Haemaphysalis lagostrophi*** Roberts, 1963.  
*Aust. J. Zool.*, 11(1): 53-57.  
 1963: *H. lagostrophi*; original description.  
 1973: *H. (Ornithophysalis) lagostrophi*; Hoogstraal & Wassef.  
 1985: *H. (O.) lagostrophi*; Hoogstraal & Kim.

***Haemaphysalis lagrangei*** Larrousse, 1925.  
*Ann. Parasit. Hum. Comp.*, 3(3): 304-305.  
 1925: *H. lagrangei*; original description.  
 1944: *H. lagrangei*; Toumanoff.  
 1966: *H. (Kaiseriana) lagrangei*; Hoogstraal & Trapido.  
 1973: *H. (K.) lagrangei*; Hoogstraal, Kammah, Santana, & Van Peenen.  
 1985: *H. (K.) lagrangei*; Hoogstraal & Kim.

***Haemaphysalis leachi*** (Audouin, 1827).  
 Description de l'Egypte, v. 1, part 4, p: 185.  
 1826: *Ixodes leachi*; original description.  
 1902: *H. canestrinii* Supino (misidentification); Neumann.  
 1915: *H. canestrinii* (misidentification); Nuttall & Warburton.  
 1915: *H. asiatica* (Supino) (misidentification); Nuttall & Warburton.  
 1939: *H. leachi media*; Oswald (as new subspecies).  
 1943: *H. leachi humerosoides*; Theiler (as new subspecies).  
 1954: *H. muhsamae*; Santos Dias (as new species).  
 1956: *H. leachii leachii*; Hoogstraal (as valid subspecies).  
 1956: *H. leachii muhsami* Santos Dias; Hoogstraal (as valid subspecies).  
 1958: *H. leachii leachii*; Hoogstraal (as valid subspecies).  
 1958: *H. leachii muhsami*; Hoogstraal (as valid subspecies).  
 1964b: *H. leachii*; Hoogstraal.  
 1966: *H. leachii*; Hoogstraal & Trapido.  
 1971b: *H. (Rhipistoma) leachi*; Hoogstraal.  
 1985: *H. (R.) leachi*; Hoogstraal & Kim.  
 1987: *H. leachi*; Matthysse & Colbo (as *H. leachi* group: "We discuss here as *H. leachi* group 1 those ticks that fit the description of *H. leachi* after differentiating from *H. spinulosa* according to Hoogstraal (1964)").

***Haemaphysalis leachi australis*** Neumann, 1905.

Arch. Parasit., 9(2): 238.

See notes under the item *H. bancrofti*.

***Haemaphysalis leachi humerosoides*** Theiler, 1943.

Notes on the Ticks off Domestic Stock from Portuguese East Africa, p: 16.

See notes under the item *H. leachi*.

***Haemaphysalis leachi indica*** Warburton, 1910.

Parasitology, 3(4): 402.

See notes under the item *H. indica*.

***Haemaphysalis leachi koningsbergeri*** Warburton & Nuttall, 1909.

Parasitology, 2(1-2): 65-66.

See notes under the item *H. koningsbergeri*.

***Haemaphysalis leachi media*** Oswald, 1939. Parasitology, 31(3): 272-273.

See notes under the item *H. leachi*.

***Haemaphysalis leachi muhsami*** Santos Dias, 1954 (Hoogstraal, 1956, for the new combination).

Mem. Estud. Mus. Zool. Univ. Coimbra, 225: 3-7.

See notes under the item *H. leachi*.

***Haemaphysalis lemuris*** Hoogstraal, 1953.

Bull. Mus. Comp. Zool. Harv., 111(2): 39-40, 87-95, 94-95, 100-101.

1953: *H. lemuri*; original description.

1979: *H. (Rhipistoma) lemuri*; Hoogstraal, Uilenberg, & Klein.

1985: *H. (R.) lemuri*; Hoogstraal & Kim.

***Haemaphysalis leporis*** Packard, 1869.

I Rep. Peabody Acad. Sci., Appendix, p: 67.

See notes under the item *H. leporispalustris*.

***Haemaphysalis leporis palustris*** (Packard, 1869).

I Rep. Peabody Acad. Sci., Appendix, p: 67.

See notes under the item *H. leporispalustris*.

***Haemaphysalis leporis proxima*** Aragão, 1911.

Mem. Inst. Oswaldo Cruz, 3: 160-170.

See notes under the item *H. leporispalustris*.

***Haemaphysalis leporispalustris* (Packard, 1869).**

- I Rep. Peabody Acad. Sci., Appendix, p: 67.  
 1869: *Ixodes leporispalustris*; original description.  
 1869: *H. leporis*; Packard.  
 1908: *H. proxima*; Aragão (as new species)  
 1911: *H. leporis proxima*; Aragão.  
 1915: *H. leporis proxima*; Nuttall & Warburton.  
 1915: *H. leporis-palustris*; Nuttall & Warburton.  
 1984: *H. leporispalustris*; Furman & Loomis.  
 1984: *H. leporispalustris*; Keirans.  
 1985: *H. (Gonixodes) leporispalustris*; Hoogstraal & Kim.

***Haemaphysalis longicornis* Neumann, 1901.**

- Mém. Soc. Zool. fr., 14(2-3): 261.  
 1901: *H. longicornis*; original description.  
 1905: *H. concinna longicornis*; Neumann.  
 1905: *H. neumanni*; Donitz (as new species)  
 1924: *H. bispinosa* Neumann (misidentification); Myers.  
 1927: *H. bispinosa* (misidentification); Ogura & Takada.  
 1936: *H. bispinosa* (misidentification); Kishida.  
 1944: *H. bispinosa* (misidentification); Derrick.  
 1953: *H. bispinosa* (misidentification); Dumbleton.  
 1955: *H. bispinosa* (misidentification); Teng.  
 1956: *H. bispinosa* (misidentification); Ishihara & Ishii.  
 1957: *H. bispinosa* (misidentification); Keegan & Toshioka.  
 1961: *H. bispinosa* (misidentification); Kitaoka.  
 1963: *H. bispinosa* (misidentification); Roberts.  
 1963: *H. neumanni* (misidentification); Somov & Shestakov.  
 1964: *H. bispinosa* (misidentification); Andrews.  
 1965: *H. neumanni* (misidentification); Trapido.  
 1966: *H. neumanni* (misidentification); Hoogstraal & Trapido.  
 1966: *H. neumanni bispinosa*; Abramov & Laptev (new combination).  
 1966: *H. bispinosa* (misidentification); Riek.  
 1968: *H. (Kaiseriana) longicornis*; Hoogstraal, Roberts, Kohls, & Tipton.  
 1984: *H. longicornis*; Keirans.  
 1985: *H. (K.) longicornis*; Hoogstraal & Kim.

***Haemaphysalis longipalpis* Warburton, 1910.**

- Parasitology, 3(4): 399-400.  
 See notes under the item *H. aculeata*.

***Haemaphysalis luzonensis* Hoogstraal & Parrish, 1968.**

- J. Parasit., 54(2): 402-410.  
 1968: *H. (Kaiseriana) luzonensis*; original description.  
 1985: *H. (K.) luzonensis*; Hoogstraal & Kim.

***Haemaphysalis madagascariensis* Colas-Belcour & Millot, 1948.**

- Bull. Soc. Path. Exot., 41(5-6).  
 1948: *H. hoodi madagascariensis*; original description.  
 1948: *H. hoodi madagascariensis*; Buck.  
 1950: *H. hoodi madagascariensis*; Zumpt.  
 1953: *H. hoodi madagascariensis*; Hoogstraal.  
 1958: *H. madagascariensis*; Santos Dias (as full species).  
 1959: *H. madagascariensis*; Hoogstraal & Kohls.  
 1965: *H. (Rhipistoma) madagascariensis*; Hoogstraal, Kohls, & Trapido.  
 1966b: *H. (R.) madagascariensis*; Hoogstraal.  
 1973: *H. (Ornithophysalis) madagascariensis*; Hoogstraal & Wassef.  
 1985: *H. (O.) madagascariensis*; Hoogstraal & Kim.

***Haemaphysalis mageshimaensis* Saito & Hoogstraal, 1973.**

- J. Parasit., 58: 950-959.  
 1973: *H. (Kaiseriana) mageshimaensis*; original description.

1974: *H. (K.) mageshimaensis*; Hoogstraal & Santana.  
 1985: *H. (K.) mageshimaensis*; Hoogstraal & Kim.

***Haemaphysalis megalaimae*** Rajagopalan, 1963.  
*J. Parasit.*, 49(2): 340-345.  
 1963: *H. megalaimae*; original description.  
 1973: *H. (Ornithophysalis) megalaimae*; Hoogstraal & Wassef.  
 1985: *H. (O.) megalaimae*; Hoogstraal & Kim.

***Haemaphysalis megaspinosa*** Saito, 1969.  
*Acta Med. Biol. Niigata*, 17(1): 87-96.  
 1969: *H. megaspinosa*; original description.  
 1985: *H. (Haemaphysalis) megaspinosa*; Hoogstraal & Kim.

***Haemaphysalis menui*** Toumanoff, 1940.  
*Rev. Méd. Fr. Extr. Orient.*, 18(8): 473-477.  
 1940: *H. menui*; original description.

***Haemaphysalis minuta*** Kohls, 1950.  
*J. Parasit.*, 36(4): 320-321.  
 1950: *H. minuta*; original description.  
 1973: *H. (Ornithophysalis) minuta*; Hoogstraal & Wassef.  
 1985: *H. (O.) minuta*; Hoogstraal & Kim.

***Haemaphysalis mjoebergi*** Warburton, 1926.  
*Parasitology*, 18(1): 57-58.  
 1926: *H. mjoebergi*; original description.  
 1957: *H. mjoebergi*; Kohls.  
 1961: *H. mjoebergi*; Kohls.  
 1981: *H. (Garnhamphysalis) mjoebergi*; Hoogstraal & Wassef.  
 1982: *H. (G.) mjoebergi*; Hoogstraal & Wassef.  
 1985: *H. (G.) mjoebergi*; Hoogstraal & Kim.

***Haemaphysalis monospinosa*** Krijgsman & Ponto, 1932.  
*Veeartsenijk. Meded. Dep. Handb. Med.-Indie*, 79: 18-19.  
 See notes under the item *H. traguli*.

***Haemaphysalis montgomeryi*** Nuttall, 1912.  
*Parasitology*, 5(1): 57-59.  
 1912: *H. montgomeryi*; original description.  
 1915: *H. montgomeryi*; Nuttall & Warburton.  
 1915: *H. flava* Neumann (misidentification); Nuttall & Warburton (see Sharif, 1928; Dhanda & Bhat, 1968).  
 1963: *H. (Fonsecaia) montgomeryi*; Santos Dias.  
 1966: *H. (Kaiseriana) montgomeryi*; Hoogstraal, Trapido, & Kohls.  
 1968: *H. (Segalia) montgomeryi*; Santos Dias (because *Fonsecaia* is a nomen bis lectum).  
 1983: *H. (S.) montgomeryi*; Hoogstraal (date of publication after Hoogstraal & Kim; however, this reference was not included in the bibliography of the Hoogstraal & Kim's revision nor in the compilation by Keirans; I was unable to find the paper).  
 1985: *H. (S.) montgomeryi*; Hoogstraal & Kim.

***Haemaphysalis moreli*** Camicas, Hoogstraal, & El-Kammah, 1972.  
*J. Parasitol.*, 58(6): 1185-1195.  
 1972: *H. (Rhipistoma) moreli*; original description.  
 1985: *H. (R.) moreli*; Hoogstraal & Kim.  
 1987: *H. moreli*; Matthysse & Colbo.

***Haemaphysalis muhsamae*** Santos Dias, 1954.  
*Mem. Estud. Mus. Zool. Univ. Coimbra*, 225: 3-7.  
 See notes under the item *H. spinulosa*.

***Haemaphysalis nadchatrami*** Hoogstraal, Trapido, & Kohls, 1965.

J. Parasit., 51(3): 433-451.  
 1915: *H. hystricis* Supino (misidentification); Nuttall & Warburton.  
 1932: *H. semermis* Neumann (misidentification); Krijgsman & Ponto.  
 1960: *H. hystricis* (misidentification); Audy, Nadchatram, & Lim.  
 1965: *H. (Kaiseriana) papuana nadchatrami*; original description.  
 1985: *H. (K.) nadchatrami*; Hoogstraal & Kim (as full species).

***Haemaphysalis nepalensis*** Hoogstraal, 1962.  
 J. Parasit., 48(2): 199-202.  
 1962: *H. (Alloceraea) nepalensis*; original description.  
 1965: *H. (Herpetobia) nepalensis*; Hoogstraal & McCarthy.  
 1985: *H. (H.) nepalensis*; Hoogstraal & Kim.

***Haemaphysalis nesomys*** Hoogstraal, Uilenberg, & Kelin, 1966.  
 J. Parasit., 52(6): 1199-1202.  
 1966: *H. (Dermaphysalis) nesomys*; original description.  
 1966: *H. (D.) nesomys*; Hoogstraal, Uilenberg, & Klein  
 1975: *H. (D.) nesomys*; Hoogstraal, Uilenberg, & Klein.  
 1985: *H. (D.) nesomys*; Hoogstraal & Kim.

***Haemaphysalis neumanni*** Donitz, 1905.  
 Sber. Ges. Freunde Berl., 4: 127-130.  
 See notes under the item *H. longicornis*.

***Haemaphysalis nishiyamai*** Sugimoto, 1935.  
 Taiwan no Chikusan, 3: 1-30.  
 See notes under the item *H. hystricis*.

***Haemaphysalis norvali*** Hoogstral & Wassef, 1983.  
 Onderst. J. Vet. Res., 50: 183-189.  
 1983: *H. (Rhipistoma) norvali*; original description.  
 1985: *H. (R.) norvali*; Hoogstral & Kim.

***Haemaphysalis novaeguineae*** Hirst, 1914.  
 Trans. Zool. Soc. Lond., 20(10): 328-330.  
 1914: *H. novaeguineae*; original description.  
 1915: *H. spinigera novaeguineae*; Nuttall & Warburton (as subspecies of).  
 1915: *H. s-----a p-----s*; Nuttall & Warburton (publication of the name would be a nomen nudum, as stated by Keirans, 1984).  
 1963: *H. novaeguineae*; Roberts.  
 1972: *H. (K.) novaeguineae*; Hoogstraal & El Kammah.  
 1984: *H. novaeguineae*; Keirans.  
 1985: *H. (K.) novaeguineae*; Hoogstraal & Kim.

***Haemaphysalis novae-guineae*** Krijgsman & Ponto, 1932.  
 Veeartsenijk. Meded. Dep. Handb. Med.-Indie, 79: 17-18.  
 See notes under the item *H. krijgsmani*.

***Haemaphysalis numidiana*** Neumann, 1905.  
 Arch. Parasit., 8(3): 230.  
 See notes under the item *H. erinacei* and subspecies.

***Haemaphysalis numidiana taurica*** Pospelova-Shtrom, 1940.  
 Parazit. Sborn. Zool. Inst. Akad. Nauk SSSR, 7: 96-99.  
 See notes under the item *H. erinacei taurica*.

***Haemaphysalis numidiana turanica*** Pospelova-Shtrom, 1939.  
 Parazit. Sborn. Zool. Inst. Akad. Nauk SSSR, 7: 96-99.  
 See notes under the item *H. erinacei turanica*.

***Haemaphysalis obesa*** Larrousse, 1925.  
 Ann. Parasit. Hum. Comp., 3(3): 302-304.  
 1925: *H. obesa*; original description.  
 1944: *H. obesa*; Toumanoff.

- 1965: *H. obesa*; Trapido.  
 1965c: *H. (Kaiseriana) obesa*; Hoogstraal, Trapido, & Kohls.  
 1971: *H. (Haemaphysalis) obesa*; Hoogstraal, Saito, Dhanda, & Bhat.  
 1983: *H. (Segalia) obesa*; Hoogstraal (date of publication after Hoogstraal & Kim; however, this reference was not included in the bibliography of the Hoogstraal & Kim's revision nor in the compilation by Keirans; I was unable to find the paper).  
 1985: *H. (S.) obesa*; Hoogstraal & Kim.

***Haemaphysalis obtusa* Donitz, 1910. Denkschr.**

- Med-Naturw Ges. Jena, 16: 492.  
 1910: *H. obtusa*; original description.  
 1915: *H. obtusa*; Nuttall & Warburton.  
 1950: *H. obtusa*; Zumpt.  
 1953: *H. obtusa*; Hoogstraal.  
 1965: *H. (Rhipistoma) obtusa*; Hoogstraal, Kohls, & Trapido.  
 1984: *H. obtusa*; Keirans.  
 1985: *H. (R.) obtusa*; Hoogstraal & Kim.

***Haemaphysalis orientalis* Nuttall & Warburton, 1915.**

- Ticks. A Monograph of Ixodoidea, part III, p: 486.  
 1915: *H. hoodi orientalis*; original description.  
 1954: *H. zambeziae*; Santos Dias (as new species).  
 1956: *H. orientalis*; Hoogstraal.  
 1971: *H. (Rhipistoma) bequaerti*; Hoogstraal, Walker, & Neitz.  
 1985: *H. (R.) orientalis*; Hoogstraal & Kim.

***Haemaphysalis ornithophila* Hoogstraal & Kohls, 1959.**

- J. Parasit., 45(4): 417-420.  
 1959: *H. ornithophila*; original description.  
 1973: *H. (Ornithophysalis) ornithophila*; Hoogstraal & Wassef.  
 1985: *H. (O.) ornithophila*; Hoogstraal & Kim.

***Haemaphysalis otophila* Schulze, 1918.**

- Sber. Ges. Naturf. Freunde Berl., 1-2: 64-66.  
 See notes under the item *H. parva* Neumann, 1897. See also notes under the item *H. intermedia*.

***Haemaphysalis otophila schulzei* Tonelli-Rondelli, 1926.**

- Res. Biol., 1(4): 51-54.  
 See notes under the item *H. intermedia*.

***Haemaphysalis palawanensis* Kohls, 1950.**

- Nat. Inst. Hlth. Bull., 192: 11-15.  
 1950: *H. palawanensis*; original description.

***Haemaphysalis papuana* Thorell, 1883.**

- Ann. Mus. Civ. Stor. Nat. Genova, 18: 62-66.  
 1883: *H. papuana*; original description.  
 1915: *H. papuana*; Nuttall & Warburton.  
 1944: *H. kinneari* Warburton (misidentification); Toumanoff.  
 1950: *H. papuana*; Anastos.  
 1957: *H. papuana*; Kohls.  
 1964: *H. papuana papuana*; Trapido, Hoogstraal, & Varma (as subspecies in the papuana complex of species).  
 1985: *H. (K.) papuana*; Hoogstraal & Kim.

***Haemaphysalis papuana kinneari* Warburton, 1913 (Trapido, Hoogstraal, & Varma, 1964 for the new combination).**

- J. Parasit., 50: 172-188.  
 See notes under the item *H. kinneari*.

***Haemaphysalis papuana nadchatrami* Hoogstraal, Trapido, & Kohls, 1965.**

J. Parasit., 50: 765-782.

See notes under the item *H. nadchatrami*.

***Haemaphysalis papuana papuana*** Thorell, 1883 (Trapido, Hoogstraal, & Varma, 1964, for the new combination).

Ann. Mus. Civ. Storia Nat. Genoa, 18: 21-69.

See notes under the item *H. papuana*.

***Haemaphysalis papuana toxopei*** Warburton, 1927 (Hoogstraal, 1964 for the new combination).

J. Parasit., 50(6): 765-782.

See notes under the item *H. toxopei*.

***Haemaphysalis paraleachi*** Camicas, Hoogstraal, & El Kammah, 1983.

J. Parasit., 69(2): 400-404.

1983: *H. (Rhipistoma) paraleachi*; original description.

1985: *H. (R.) paraleachi*; Hoogstraal & Kim.

1987: *H. paraleachi*; Matthysse & Colbo.

***Haemaphysalis paraturturis*** Hoogstraal, Trapido, & Rebello, 1963.

J. Parasit., 49(4): 686-691.

1915: *H. bispinosa intermedia* Warburton & Nuttall (in part); Nuttall & Warburton.

1928: *H. bispinosa intermedia* (misidentification); Sharif.

1963: *H. paraturturis*; original description.

1971c: *H. (H.) paraturturis*; Hoogstraal

1984: *H. paraturturis*; Keirans.

***Haemaphysalis parmata*** Neumann, 1905.

Arch. Parasit., 9(2): 228-230.

1905: *H. parmata*; original description.

1915: *H. parmata*; Nuttall & Warburton.

1954: *H. parmata*; Hoogstraal.

1956: *H. parmata*; Hoogstraal.

1960: *H. parmata*; Santos Dias.

1966: *H. parmata*; Elbl & Anastos.

1984: *H. parmata*; Keirans.

1985: *H. (Kaiserianna) parmata*; Hoogstraal & Kim.

1987: *H. parmata*; Matthysse & Colbo.

***Haemaphysalis parva*** (Neumann, 1897).

Mém. Soc. Zool. Fr., 10(3-4).

1897: *Dermacentor parvus*; original description.

1915: *Haemaphysalis parva*; Nuttall & Warburton.

1918: *H. otophila*; Schulze.

1963: *H. parva*; Morel.

1963: *H. parva*; Trapido & Hoogstraal.

1983: *H. (Segalia) parva*; Hoogstraal.

1984: *H. parva*; Keirans.

1985: *H. (S.) parva*; Hoogstraal & Kim.

***Haemaphysalis parva*** Neumann, 1908.

Notes Leyden Mus., 30(1): 89-90.

See notes under the item *H. intermedia*.

***Haemaphysalis pavlovskyi*** Pospelova-Shtrom, 1935.

Trudy Tadzhik. Komplek. Eksped. 1932 Narkomzd. Tadzhik SSR, 10: 115-134.

1935: *H. pavlovskyi*; original description.

1940: *H. (Haemaphysalis) pavlovskyi*; Pospelova-Shtrom.

1950: *H. pavlovskyi*; Pomerantzev.

1973: *H. doenitzi* Warburton & Nuttall; Hoogstraal & Wassef (as synonym of).

1985: *H. (Ornithophysalis) pavlovskyi*; Hoogstraal & Kim.

***Haemaphysalis pedetes*** Hoogstraal, 1972.

J. Parasit., 58(5): 979-983.

1933: *H. numidiana* (misidentification); Warburton.1934: *H. numidiana* (misidentification); Cooley.1972: *H. (Rhipistoma) pedetes*; original description.1985: *H. (R.) pedetes*; Hoogstraal & Kim.***Haemaphysalis pentalagi*** Pospelova-Shtrom, 1935.

Trudy Tadzhik. Bazy Akad. Nauk SSSR, 5: 216-217.

1935: *H. pentalagi*; original description.1970: *H. (Haemaphysalis) pentalagi*; Hoogstraal & Yamaguti.1985: *H. (H.) pentalagi*; Hoogstraal & Kim.***Haemaphysalis peregrina*** Pickard-Cambridge, 1899.

Ann. Mag. Nat. Hist., 3(17): 469-470.

See notes under the item *H. punctata*.***Haemaphysalis petrogalis*** Roberts, 1970.

Australian Ticks, C.S.I.R.O., Oct.: 65-66.

1970: *H. petrogalis*; original description.1973: *H. (Ornithophysalis) petrogalis*; Hoogstraal & Wassef.1985: *H. (O.) petrogalis*; Hoogstraal & Kim.***Haemaphysalis phasiana*** Saito, Hoogstraal, & Wassef, 1974.

J. Parasit., 60(1): 198-208.

1957: *H. sp.*; Keegan & Toshioka.1959: *H. doenitzi* Warburton & Nuttall (misidentification); Saito.1973: *H. sp.*; Hoogstraal & Wassef.1974: *H. (Ornithophysalis) phasiana*; original description.1985: *H. (O.) phasiana*; Hoogstraal & Kim.***Haemaphysalis pospelovashstromae*** Hoogstraal, 1966.

J. Parasit., 52(4): 791-797.

1966: *H. (Allophysalis) pospelovashstromae*; original description.1985: *H. (A.) pospelovashstromae*; Hoogstraal & Kim.***Haemaphysalis proxima*** Aragão in Rhor, 1909.

Estudos sobre Ixodidas do Brasil, p: 100-110.

See notes under the item *H. leporispalustris*.***Haemaphysalis proxima*** Warburton & Nuttall, 1909.

Parasitol., 2(1-2): 61-62.

See notes under the item *H. cornigera*.***Haemaphysalis psalistas*** Hoogstraal, Kohls & Parrish, 1967.

J. Parasit., 53(5): 1096-1102.

1967: *H. (Kaiseriana) psalistas*; original description.1985: *H. (K.) psalistas*; Hoogstraal & Kim.***Haemaphysalis punctaleachi*** Camicas, Hoogstraal, & El Kammah, 1973.

J. Parasit., 59(3): 563-568.

1973: *H. (Rhipistoma) punctaleachi*; original description.1985: *H. (R.) punctaleachi*; Hoogstraal & Kim.1987: *H. punctaleachi*; Matthysse & Colbo.***Haemaphysalis punctata*** Canestrini & Fanzago, 1878.

Atti R. Ist. Veneto Sic., Lett. Arti, 4(1): 189.

1878: *H. punctata*; original description.1878: *H. rhinolophi* (misidentification); Canestrini & Fanzago.1899: *H. peregrina*; Pickard-Cambridge (as new species).1905: *H. cinnabarina punctata*; Neumann.1915: *H. cinnabarina punctata*; Nuttall & Warburton.

- 1918: *H. cinnabarina punctata autumnalis*; Schulze.  
 1918: *H. cinnabarina punctata perdentata*; Schulze.  
 1928: *H. punctata montana*; Kamenski.  
 1939: *H. cinnabarina punctata recta*; Oswald.  
 1963: *H. (Aboimisalis) punctata*; Santos Dias.  
 1974: *H. (A.) punctata*; Hoogstraal.  
 1985: *H. (A.) punctata*; Hoogstraal & Kim.

***Haemaphysalis punctata montana*** Kamensky, 1928.  
 Three years' works on Piroplasmosis: 27-28.  
 See notes under the item *H. punctata*.

- Haemaphysalis ramachandrai*** Dhanda, Hoogstraal, & Bhat, 1970.  
*J. Parasit.*, 56(4): 823-831.  
 1970: *H. (Kaiseriana) ramachandrai*; original description.  
 1985: *H. (K.) ramachandrai*; Hoogstraal & Kim.

- Haemaphysalis ratti*** Kohls, 1948.  
*J. Parasit.*, 34(2): 154-157.  
 1948: *H. ratti*; original description.  
 1973: *H. (Ornithophysalis) ratti*; Hoogstraal & Wassef.  
 1985: *H. (O.) ratti*; Hoogstraal & Kim.

- Haemaphysalis renschi*** Schulze, 1933 and 1936.  
*Arch. Hydrobiol.*, Suppl., 12: 492.  
 1933: *H. renschi* (mention without formal description).  
 1936: *H. renschi*; original description.  
 1950: *H. bispinosa* Neumann (misidentification); Anastos.  
 1968: *H. (Kaiseriana) renschi*; Hoogstraal & Anastos.  
 1985: *H. (K.) renschi*; Hoogstraal & Kim.

- Haemaphysalis rhinolophi*** Canestrini & Fanzago, 1878.  
*Atti R. Ist. Veneto Sci. Lett. Arti*, 4(1): 189-190.  
 See notes under the item *H. punctata*.

- Haemaphysalis roubaudi*** Toumanoff, 1940.  
*Rev. Méd. Fr. Extr. Orient.*, 18(8): 487-489.  
 1940: *H. roubaudi*; original description.  
 1944: *H. roubaudi*; Toumanoff.  
 1966: *H. (Kaiseriana) roubaudi*; Hoogstraal, Trapido, & Kohls.  
 1985: *H. (Haemaphysalis) roubaudi*; Hoogstraal & Kim.

- Haemaphysalis rugosa*** Santos Dias, 1956.  
*Mem. Estud. Mus. Zool. Univ. Coimbra*, 242: 5-8.  
 1915: *H. aciculifer* Warburton (misidentification); Nuttall & Warburton.  
 1956: *H. aciculifer rugosa*; original description.  
 1972: *H. (Kaiseriana) rugosa*; Hoogstraal & El Kammah.  
 1985: *H. (K.) rugosa*; Hoogstraal & Kim.  
 1987: *H. rugosa*; Matthysse & Colbo.

- Haemaphysalis rusae*** Kohls, 1950.  
*Nat. Inst. Hlth. Bull.*, 192: 15-17.  
 1950: *H. rusae*; original description.  
 1981: *H. (Garnhamphysalis) rusae*; Hoogstraal & Wassef.  
 1983a: *H. (G.) rusae*; Hoogstraal & Wassef.  
 1985: *H. (G.) rusae*; Hoogstraal & Kim.

- Haemaphysalis sambar*** Hoogstraal, 1971.  
*J. Parasit.*, 57(1): 173-176.  
 1971: *H. (Haemaphysalis) sambar*; original description.  
 1984: *H. sambar*; Keirans.

- Haemaphysalis sanguinolenta*** Koch, 1844.  
*Arch. Naturgesch.*, 10(1): 237.

See notes under the item *H. cinnabarinia*.

***Haemaphysalis sciuri* Kohls, 1950.**

Nat. Inst. Hlth. Bull., 192: 17-18.

1950: *H. sciuri*; original description.

1973: *H. (Ornithophysalis) sciuri*; Hoogstraal & Wassef.

1985: *H. (O.) sciuri*; Hoogstraal & Kim.

***Haemaphysalis semermis* Neumann, 1901.**

Mém. Soc. Zool. Fr., 14(2-3): 263, 264, 334, 336, 346.

1901: *H. semermis*; original description.

1902: *H. birmaniae* Supino (misidentification); Neumann.

1915: *H. hystricis* Supino (misidentification); Nuttall & Warburton.

1932: *H. hystricis* (misidentification); Krijgsman & Ponto.

1950: *H. hystricis* (misidentification); Anastos.

1957: *H. hystricis* (misidentification); Kohls.

1960: *H. hystricis* (misidentification); Audy, Nadchatram, & Lim.

1965: *H. (Kaiseriana) semermis*; Hoogstraal, Trapido, & Kohls.

1985: *H. (K.) semermis*; Hoogstraal & Kim.

***Haemaphysalis sewelli* Sharif, 1928.**

Rec. Indian Mus., 30: 217-344.

1928: *H. sewelli*; original description.

1962: *H. sewelli*; Hoogstraal & Varma.

1963: "The synonym of *H. sewelli* (with *H. sulcata*) is uncertain"; Morel.

***Haemaphysalis shimoga* Trapido & Hoogstraal, 1964.**

J. Parasit., 50(2): 303-310.

1964: *H. cornigera shimoga*; original description.

1985: *H. (Kaiseriana) shimoga*; Hoogstraal & Kim "tentatively considered subspecies of cornigera as valid full species".

***Haemaphysalis silacea* Robinson, 1912.**

Parasitology, 4(4): 478-480.

1912: *H. silacea*; original description.

1963: *H. silacea*; Hoogstraal.

1985: *H. (Haemaphysalis) silacea*; Hoogstraal & Kim.

***Haemaphysalis silvafelis* Hoogstraal & Trapido, 1963.**

J. Parasit., 49(2): 346-349.

1963: *H. silvafelis*; original description.

1971c: *H. (Haemaphysalis) silvafelis*; Hoogstraal.

***Haemaphysalis simplex* Neumann, 1897.**

Mém. Soc. Zool. Fr., 10(3-4): 345-346.

1897: *H. simplex*; original description.

1915: *H. simplex*; Nuttall & Warburton.

1973: *H. (Ornithophysalis) simplex*; Hoogstraal & Wassef.

1979: *H. (O.) simplex*; Hoogstraal, Uilenberg, & Klein.

1984: *H. simplex*; Keirans.

1985: *H. (O.) simplex*; Hoogstraal & Kim.

***Haemaphysalis simplicima* Hoogstraal & Wassef, in Hoogstraal, Uilenberg, & Klein, 1979.**

Les tiques (Ixodoidea) de Madagascar et leur rôle vecteur. Archives de l'Institut Pasteur de Madagascar, numéro spécial, pp: 34-39.

1979: *H. (Ornithophysalis) simplicima*; original description.

1985: *H. (O.) simplicima*; Hoogstraal & Kim.

***Haemaphysalis spiniceps* Warburton & Nuttall, 1909.**

Parasitology, 2: 68.

See notes under the item *H. cornigera*.

***Haemaphysalis spinigera* Neumann, 1897.**

- Mém. Soc. Zool. Fr., 10(3-4): 352-354.  
 1897: *H. spinigera*; original description.  
 1915: *H. spinigera*; Nuttall & Warburton.  
 1963: *H. (Robertsalis) spinigera*; Santos Dias.  
 1984: *H. spinigera*; Keirans.  
 1985: *H. (K.) spinigera*; Hoogstraal & Kim.

***Haemaphysalis spinigera novae-guineae*** Nuttall & Warburton, 1915.

Ticks. A Monograph of Ixodoidea, part III: 449-452.  
 See notes under the item *H. novaeguineae* Hirst.

***Haemaphysalis spinulosa*** Neumann, 1906.

- Arch. Parasit., 10(2): 212-213.  
 1906: *H. spinulosa*; original description.  
 1909: *H. spinulosa*; Blanchard.  
 1910: *H. spinulosa*; Donitz.  
 1911: *H. spinulosa*; Neumann.  
 1915: *H. spinulosa*; Nuttall & Warburton.  
 1954: *H. muhsamae*; Santos Dias (as new species)  
 1956: *H. leachii muhsami*; Hoogstraal (as subspecies of *H. leachii*).  
 1958: *H. leachii muhsami*; Hoogstraal.  
 1958: *H. ethiopica*; Santos Dias (as new species).  
 1964b: *H. spinulosa*; Hoogstraal.  
 1965: *H. (Rhipistoma) spinulosa*; Hoogstraal et al.  
 1972: *H. (R.) spinulosa*; Camicas, Hoogstraal, & El Kammah.  
 1983b: *H. (R.) spinulosa*; Hoogstraal & Wassef.  
 1985: *H. (R.) spinulosa*; Hoogstraal & Kim.  
 1987: *H. spinulosa*; Matthysse & Colbo.

***Haemaphysalis subelongata*** Hoogstraal, 1953.

- Bull. Mus. Comp. Zool. Harv, 111(2): 69-76.  
 1953: *H. subelongata*; original description.  
 1974: *H. (Elongiphysalis) subelongata*; Hoogstraal, Wassef, & Uilenberg.  
 1979: *H. (E.) subelongata*; Hoogstraal, Uilenberg, & Klein.  
 1984: *H. subelongata*; Keirans.  
 1985: *H. (E.) subelongata*; Hoogstraal & Kim.

***Haemaphysalis sulcata*** Canestrini & Fanzago, 1878.

- Atti R. Ist. Veneto Sci. Lett Arti, 4(1): 188-189.  
 1878: *H. sulcata*; original description.  
 1890: *Herpetobia sulcata*; Canestrini.  
 1927: *H. sulcata otophila*; Schulze & Schlottke.  
 1928: *H. cholodkovskyi*; Olenev (as new species).  
 1930: *H. cinnabarinata punctata musimonis*; Tonelli-Rondelli.  
 1936: *H. cinnabarinata cretica*; Sénévet & Caminopetros.  
 1937: *H. cinnabarinata punctata longicornis*; Oswald (see Hoogstraal et al., 1968).  
 1938: *H. beneditoi*; Gil Collado.  
 1961: *H. sulcata svenigae*; Filimonov.  
 1965: *H. (Herpetobia) sulcata*; Hoogstraal & McCarthy.  
 1984: *H. sulcata*; Keirans.  
 1985: *H. (H.) sulcata*; Hoogstraal & Kim.

***Haemaphysalis sulcata otophila*** Schulze & Schlottke, 1927.

Zool. Anz., 74(7-10): 157-159.

See notes under the item *H. sulcata*.

***Haemaphysalis sulcata svenigae*** Filimonov, 1961.

Trudy Ul'yanov. Sel.-Khоз. Inst., 8(2): 70.

See notes under the item *H. sulcata*.

***Haemaphysalis sumatraensis*** Hoogstraal, El Kammah, Kadarsan, & Anastos, 1971.

J. Parasit., 57(5): 1104-1109.  
 1971: *H. sumatraensis*; original description.  
 1983: *H. (Segalia) sumatraensis*; Hoogstraal.  
 1985: *H. (S.) sumatraensis*; Hoogstraal & Kim.

***Haemaphysalis sundrai*** Sharif, 1928.  
 Rec. Indian Mus., 30(3): 245-246.  
 1928: *H. sundrai*; original description.  
 1962: *H. sundrai*; Hoogstraal & Varma.  
 1985: *H. (Herpetobia) sundrai*; Hoogstraal & Kim.

***Haemaphysalis susphilippensis*** Hoogstraal, Khols, & Parrish, 1968.  
 J. Parasit., 54(3): 616-621.  
 1950: *H. papuana* Thorell (misidentification); Kohls.  
 1964: *H. papuana papuana* Thorell (misidentification); Trapido, Hoogstraal & Varma.  
 1968: *H. (Kaiseriana) susphilippensis*; original description.  
 1985: *H. (K.) susphilippensis*; Hoogstraal & Kim.

***Haemaphysalis taiwana*** Sugimoto, 1936.  
 J. Soc. Trop. Agric. Taiwan, 8(4): 337-339.  
 1936: *H. cornigera taiwana*; original description.  
 1985: *H. (Kaiseriana) taiwana*; Hoogstraal & Kim "tentatively considered subspecies of cornigera as valid full species".

***Haemaphysalis tauffliebi*** Morel, 1965.  
 Acarol., 7(2): 281-284.  
 1965: *H. tauffliebi*; original description.  
 1973: *H. (Ornithophysalis) tauffliebi*; Hoogstraal & Wassef.  
 1985: *H. (O.) tauffliebi*; Hoogstraal & Kim.

***Haemaphysalis taurica*** Feldman-Muhsam, 1953.  
 Bull Res. Counc. Israel, 2(4): 375-376.  
 See notes under the item *H. erinacei taurica*.

***Haemaphysalis taurica ornata*** Feldman-Muhsam, 1956.  
 Bull. Res. Counc. Israel, Sect. B: 5(3-4): 298-299.  
 See notes under the item *H. erinacei ornata*.

***Haemaphysalis theilerae*** Hoogstraal, 1953.  
 Bull. Mus. Comp. Zool. Harv., 111(2): 76-83.  
 1953: *H. theilerae*; original description.  
 1963: *H. (Sharifiella) theilerae*; Santos Dias.  
 1985: *H. (S.) theilerae*; Hoogstraal & Kim.

***Haemaphysalis tibetensis*** Hoogstraal, 1965.  
 J. Parasit., 51(3): 452-459.  
 1965: *H. tibetensis*; original description.  
 1985: *H. (Allophysalis) tibetensis*; Hoogstraal & Kim.

***Haemaphysalis tiptoni*** Hoogstraal, 1953.  
 Bull. Mus. Comp. Zool. Harv., 111(2): 64-69.  
 1953: *H. tiptoni*; original description.  
 1974: *H. (Elongiphysalis) tiptoni*; Hoogstraal, Wassef, & Uilenberg.  
 1979: *H. (E.) tiptoni*; Hoogstraal, Uilenberg, & Klein.  
 1985: *H. (E.) tiptoni*; Hoogstraal & Kim.

***Haemaphysalis toxopei*** Warburton, 1927.  
 Parasitology, 19: 405-411.  
 1927: *H. toxopei*; original description.  
 1932: *H. toxopei*; Krijgsman & Ponto.  
 1944: *H. toxopei*; Toumanoff.  
 1950: *H. toxopei*; Anastos.

1964: *H. papuana toxopei*; Hoogstraal (as subspecies of *H. papuana* Thorell).  
 1965: *H. (Kaiseriana) papuana toxopei*; Hoogstraal, Trapido, & Kohls.  
 1984: *H. toxopei*; Keirans.

***Haemaphysalis traguli* Oudemans, 1928.**

Ent. Ber., 7: 376-377.  
 1928: *H. traguli*; original description.  
 1932: *H. monospinosa*; Krijgsman & Ponto (as new species) (see Schulze, 1934; Anastos, 1950; Hoogstraal, 1964).  
 1934: *H. traguli*; Schulze.  
 1944: *H. monospinosa* (misidentification); Toumanoff.  
 1950: *H. traguli*; Anastos.  
 1957: *H. traguli*; Kohls.  
 1960: *H. traguli*; Audy, Nadchatram, & Lim.  
 1964a: *H. traguli*; Hoogstraal.  
 1964a: *H. tragulus*; Hoogstraal (lapsus for *traguli*).  
 1971c: *H. (Haemaphysalis) traguli*; Hoogstraal.  
 1984: *H. traguli*; Keirans.

***Haemaphysalis traubii* Kohls, 1955.**

J. Parasit., 41(3): 313-314.  
 1955: *H. traubii*; original description.  
 1970: *H. (Haemaphysalis) traubii*; Hoogstraal.  
 1971: *H. (H.) traubii*; Hoogstraal & El Kammah.  
 1985: *H. (H.) traubii*; Hoogstraal & Kim.

***Haemaphysalis trispinosa* Toumanoff, 1941.**

Rev. Med. Franc. Extr. Or., 19: 1042-1043.  
 See notes under the item *H. hystricis*.

***Haemaphysalis turturis* Nuttall & Warburton, 1915.**

Ticks. A Monograph of Ixodoidea, Part III: 410.  
 1915: *H. turturis*; original description.  
 1915: *H. parva* (misidentification); Warburton (see Keirans, 1984).  
 1928: *H. turturis*; Sharif.  
 1933: *H. bispinosa* (misidentification); Warburton (see Keirans, 1984).  
 1963: *H. turturis*; Trapido, Hoogstraal, & Varma.  
 1984: *H. turturis*; Keirans.

***Haemaphysalis turturis latipunctata* Toumanoff, 1944.**

Les Tiques de l'Indochine, pp: 55-57.  
 1944: *H. turturis latipunctata*; original description.  
 1963: *H. turturis latipunctata*; Trapido, Hoogstraal, & Varma: "The status of this form is uncertain".

***Haemaphysalis verticalis* Itagaki, Noda, & Yamaguchi, 1944.**

Ticks Parasitic on Domestic Animals of Asia, p: 76-97.  
 1944: *H. verticalis*; original description.  
 1973: *H. (Ornithophysalis) verticalis*; Hoogstraal & Wassef.  
 1984: *H. verticalis*; Keirans.  
 1985: *H. (Haemaphysalis) verticalis*; Hoogstraal & Kim.

***Haemaphysalis vidua* Warburton & Nuttall, 1909.**

Parasitology, 2(1-2): 66-67.  
 1909: *H. vidua*; original description.  
 1915: *H. vidua*; Nuttall & Warburton.  
 1962: *H. vidua*; Hoogstraal.  
 1964: *H. vidua*; Hoogstraal.  
 1971c: *H. (H.) vidua*; Hoogstraal.  
 1984: *H. vidua*; Keirans.

***Haemaphysalis vietnamensis* Hoogstraal & Wilson, 1966.**

J. Parasit., 52(3): 614-617.  
 1966: *H. (Alloceraea) vietnamensis*; original description.

1985: *H. (A.) vietnamensis*; Hoogstraal & Kim.

***Haemaphysalis warburtoni*** Nuttall, 1912.

Parasitology, 5(1): 55-57.

1912: *H. warburtoni*; original description.

1915: *H. warburtoni*; Nuttall & Warburton.

1959: *H. (Allophysalis) warburtoni*; Hoogstraal.

1965: *H. (A.) warburtoni*; Hoogstraal.

1966: *H. (A.) warburtoni*; Hoogstraal

1984: *H. warburtoni*; Keirans.

1985: *H. (A.) warburtoni*; Hoogstraal & Kim.

***Haemaphysalis warburtoni kopet-daghicus*** Kerbabaev, 1962.

Izv. Akad. Nauk Turkmen SSR, s. Biol. Nauk (1): 77-80.

See notes under the item *H. kopetdaghica*.

***Haemaphysalis weidneri*** Santos Dias, 1958.

Mem. Estud. Mus. Zool. Univ. Coimbra, 253, 32 p.

See notes under the item *H. doenitzii*.

***Haemaphysalis wellingtoni*** Nuttall & Warburton, 1908.

Proc. Camb. Phil. Soc., 14(4): 397-398.

1908: *H. wellingtoni*; original description.

1915: *H. wellingtoni*; Nuttall & Warburton.

1971c: *H. (H.) wellingtoni*; Hoogstraal.

1981: *H. wellingtoni*; Keirans & Brewster.

1981: *H. wellingtoni*; Moritz & Fischer.

1984: *H. wellingtoni*; Keirans.

***Haemaphysalis xinjiangensis*** Teng, 1980.

Acta Zootax. Sin., 5: 144-149.

1980: *H. xinjiangensis*; original description.

1985: *H. (Allophysalis) xinjiangensis*; Hoogstraal & Kim.

***Haemaphysalis yensi*** Toumanoff, 1944.

Les Tiques de l'Indochine, p: 74-75.

1944: *H. yensi*; original description.

1966: *H. (Kaiseriana) yensi*; Hoogstraal & Trapido.

1972: *H. (K.) yensi*; Saito & Hoogstraal.

1985: *H. (K.) yensi*; Hoogstraal & Kim.

***Haemaphysalis zambeziae*** Santos Dias, 1953.

Mem. Estud. Mus. Zool. Univ. Coimbra, 219: 1-7.

See notes under the item *H. orientalis*.

***Haemaphysalis zumpti*** Hoogstraal & El Kammah, 1974.

J. Parasit., 60(1): 188-197.

1974: *H. (Rhipistoma) zumpti*; original description.

1985: *H. (R.) zumpti*; Hoogstraal & Kim.

### **GENUS ANOCENTOR Schulze, 1937.**

***Anocentor columbianus*** Schulze, 1937.

Zool. Anz., 120(1-2): 24-26.

See data under the item *Anocentor nitens*.

***Anocentor nitens*** (Neumann, 1897).

Mém Soc. Zool. Fr., 10: 376-384.

1897: *Dermacentor nitens*; original description.

1908: *D. nitens*; Banks.

1910: *D. nitens*; Stiles.

1911: *D. nitens*; Neumann.

1912: *D. nitens*; Hooker, Bishopp & Wood.

- 1937: *Anocentor columbianus*; Schulze (as new genus and species).  
 1938: *Otocentor nitens*; Cooley (as new genus).  
 1953: *A. nitens*; Vogelsang & Santos Dias.  
 1960: *A. nitens*; Arthur consider *Anocentor* as a valid generic name.  
 1978: *D. nitens*; Strickland, Gerrish, Hourigan & Schubert retain the generic name *Dermacentor* for such as species.  
 1983: *A. nitens*; Mangold, Bermudez, & Guglielmone.  
 1986: *D. nitens*; Yunker, Keirans, Clifford & Easton (retain *Dermacentor* as generic denomination).  
 1990: *D. nitens*; Gunn & Hilburn.  
 1990: *A. nitens*; Estrada-Peña (paper in press and not listed here).

**GENUS COSMIOMMA Schulze, 1919.**

- Cosmiomma hippopotamensis* (Denny, 1843).  
*Ann. Mag. Nat. Hist.*, 12: 312.  
 1843: *Ixodes bimaculatus*; original description.  
 1843: *Ixodes hippopotamensis*; Denny.  
 1844: *Amblyomma hippopotamense*; Koch.  
 1909: *Hyalomma hippopotamense*; Howard.  
 1910: *Dermacentor hippopotamensis*; Dönitz.  
 1919: *Cosmiomma hippopotamensis*; Schulze.  
 1951: *D. hippopotamensis*; Zumpt (synonymized *Cosmiomma* with *Dermacentor*).  
 1956: *D. (Cosmiomma) hippopotamensis*; Hoogstraal.  
 1958: *C. bimaculatum*: Santos Dias stated that, although the genus *Cosmiomma* is a valid one, the correct specific denomination is *bimaculatum* (as having priority by original denomination).  
 1960: *C. hippopotamensis*; Arthur (consider *Cosmiomma* as a generic valid name).

**GENUS DERMACENTOR KOCH, 1844.**

- Dermacentor abaensis* Teng, 1963.  
*Acta Entomol. Sin.*, 12(2): 225-228.  
 1963: *D. abaensis*; original description.

- Dermacentor albicollis* Koch, 1844.  
*Arch. Naturgesch.*, 10(1): 236.  
 See notes under the item *D. reticulatus*.

- Dermacentor albipictus* (Packard, 1869).  
*Am. Naturalist*, 3(7): 365-366 (based on Hays & Packard, 1868, *Am. Naturalist*., 2(10): 599).  
 1868: "Moose tick": Hays & Packard (no scientific name).  
 1869: *Ixodes albipictus*; original description.  
 1869: *Ixodes nigrolineatus*; Packard. The description is that of a female specimen, but the type of Packard is a male (see Bequaert, 1946).  
 1897: *Dermacentor variegatus*; Neumann.  
 1901: *D. variegatus*; Salmon & Stiles.  
 1907: *D. nigrolineatus*; Banks.  
 1907: *D. albipictus*; Hunter & Hooker.  
 1910: *D. albipictus*; Stiles.  
 1910: *D. salmoni*; Stiles.  
 1911: *D. variegatus*; Neumann.  
 1913: *D. albipictus*; Bishopp & Wood.  
 1913: *D. nigrolineatus*; Bishopp & Wood.  
 1915: *D. albipictus*; Hewitt.  
 1933: *D. varius*; Schulze (proposed new name for *D. variegatus* Neumann).  
 1938: *D. albipictus*; Cooley.  
 1938: *D. albipictus nigrolineatus*; Cooley.  
 1946: *D. erraticus*; Bequaert.  
 1946: *D. erraticus albipictus*; Bequaert.  
 1950: *D. albipictus*; Brown & Kohls.  
 1956: *D. albipictus*; Gregson.

1960: *D. albipictus*; Arthur.  
 1960: *D. albipictus nigrolineatus*; Arthur.  
 1963: *D. (Americentor) albipictus*; Santos Dias.  
 1978: *D. albipictus* and *D. nigrolineatus*; Strickland, Gerrish, Hourigan & Schubert consider these to be separate species.  
 1984: *D. albipictus*; Furman & Loomis considered *D. nigrolineatus* as a synonym of *D. albipictus*, with no mention of subspecies.  
 1986: *D. albipictus*; Yunker, Keirans, Clifford & Easton: in the key of *Dermacentor* species from the New World, there is no mention to *nigrolineatus* as a variety nor a full species.

***Dermacentor albipictus kamtschadalus*** Neumann, 1908.  
 Notes Lyden Mus., 30(1): 16-17.  
 See notes under the item *D. kamtschadalus*.

***Dermacentor americanus*** Neumann, 1897.  
 Mém. Soc. Zool. Fr., 10(3-4): 234.  
 See notes under the item *D. variabilis*.

***Dermacentor andersoni*** Stiles, 1908.  
 U.S. Publ. Hlth. Mar. Hosp., 23: 949.  
 1892: *D. venustus*; Marx. This name is a *nomen nudum* (see below).  
 1897: *D. reticulatus*; Neumann considered *D. venustus* as a synonym of *D. reticulatus*.  
 1908: *D. andersoni venustus*; Banks, original description for specimens from Texas, named from Marx's manuscript name.  
 1908: *D. andersoni*; Stiles believed the species from Montana to differ from *venustus* and described the Montana specimens as *andersoni*, a name he had used in manuscript in 1905.  
 1908: *D. modestus*; Banks; Arthur (1960) stated that these specimens are from tubes labelled *modestus* with no additional details and that are a synonym of *andersoni*.  
 1924: *D. venustus*; Cockerell questioned the validity of *venustus* as from 1897, pointing out that the name was applied to the undescribed specimens of Marx; accordingly the name should date from Banks 1908.  
 1938: *D. andersoni*; Cooley examined the available types of *venustus* Marx, *venustus* Banks, and *andersoni* Stiles and ascertained that they are one and the same species.  
 1960: *D. andersoni*; Arthur.  
 1963: *D. (Olenevia) andersoni*; Santos Dias.  
 1978: *D. andersoni*; Strickland, Gerrish, Hourigan & Schubert.  
 1986: *D. andersoni*; Yunker, Keirans, Clifford & Easton refers to the conflictive species as "D. *venustus* Marx in Neumann, 1897", since the first mention is in this paper.

***Dermacentor andersoni venustus*** Banks, 1908.  
 Tech. Ser. Bur. Ent. U.S. Dept. Agric., 15: 46-47.  
 See notes under the item *D. andersoni*.

***Dermacentor antrorum*** Reznik, 1950.  
 Mater; Poznan. Fauny i Flory SSSR, 30: 112-114.  
 1950: *D. antrorum*: original description.  
 1963: *D. (Kohlsiella) antrorum*: Santos Dias.

***Dermacentor approximans*** Olenev, 1927.  
 Dokl. Akad. Nauk. SSSR, A, 14: 219-224.  
 The compiler was unable to find the original description and references to this species; The only available mention to me is from the book "Index-Catalogue of Medical and Veterinary Zoology, Special Publication no. 3. III;-Checklist of families, genera, species, and subspecies of ticks", by Mildred Doss & George Anastos (1977), issued by the U.S. Dept. of Agriculture.

***Dermacentor asiaticus*** Emel'yanova & Kozlovskaya 1967.  
 Zool. Zh., 46(7): 1101-1105.

1966: *D. asiaticus*; original description.  
 1974: *D. (Asiacentor) asiaticus*; Filippova & Panova.  
 1989: *D. (A.) asiaticus*; Filippova & Panova.

**Dermacentor asper** Arthur, 1960.  
 Ticks, a monograph of the Ixodoidea, part V, pp: 114.  
 1960: *D. asper*; original description.

**Dermacentor ater** Schulze, 1939.  
 Z. Parasitenk., 10(6): 725.  
 See notes under the item *D. steini*.

**Dermacentor atrosignatus** Neumann, 1906.  
 Arch. Parasit., 10(2): 210-211.  
 1906: *D. atrosignatus*; original description from a male of unknown origin but "probably Australia".  
 1911: *D. atrosignatus*; Fielding (see Wassef & Hoogstraal, 1984)  
 1933: *Indocentor atrosignatus*; Schulze (as new genus).  
 1935: *Indocentor bellulus*; Schulze (as new species).  
 1937: *D. atrosignatus*; Sugimoto.  
 1950: *D. (Indocentor) atrosignatus*; Pomerantzev.  
 1950: *D. (I.) auratus atrosignatus*; Anastos.  
 1960: *D. atrosignatus*; Arthur.  
 1984: *D. (I.) atrosignatus*; Wassef & Hoogstraal stated that *D. atrosignatus* does not occur at Australia.

**Dermacentor aulicus** Hirst, 1916.  
 Ann. Mag. Nat. Hist., 8, 17: 308.  
 See notes under the item *D. marginatus*.

**Dermacentor auratus** Supino, 1897.  
 Atti; Soc. Ven.-Trent. Sc. Nat. Padova, 3(1): 235.  
 1897: *D. auratus*; original description.  
 1897: *D. auratus*; Neumann.  
 1901: *D. compactus*; Neumann (as new species, *pro parte*, see Arthur, 1960).  
 1905: *D. auratus compactus* and *D. auratus auratus*; Neumann, new combination.  
 1933: *Indocentor auratus* and *I. auratus sumatrana*; Schulze (as new subgenus).  
 1950: *D. auratus*; Kohls considered *Indocentor* as a synonym of *Dermacentor*.  
 1950: *D. (I.) auratus*; Pomerantzev recognizes *Indocentor* as a subgenus of *Dermacentor*.  
 1960: *D. auratus*; Arthur considered *compactus* and associated subspecies to be "variants" of *D. auratus*.  
 1984: *D. (I.) auratus*; Wassef & Hoogstraal.

**Dermacentor auratus compactus** Neumann, 1901.  
 Mém. Soc. Zool. Fr., 14: 2-3.  
 See notes under the item *D. auratus* and *D. compactus*.

**Dermacentor auratus sumatrana** Schulze, 1933.  
 Z. Parasitenk., 10(6): 725.  
 See notes under the item *D. auratus*.

**Dermacentor bellulus** (Schulze, 1935).  
 Zool. Anz., 112(9-10): 234-236.  
 See notes under the item *D. atrosignatus*.

**Dermacentor bifurcatus** (Neumann, 1899).  
 Arch. Parasit., 8(3): 453.  
 1899: *Ixodes bifurcatus*; original description.  
 1901: *I. brunneus* Koch; Neumann degrades *I. bufurcatus* to a synonym of *I. brunneus*.  
 1904: *D. bifurcatus*; Neumann.  
 1908: *D. bifurcatus*; Banks regards *bifurcatus* as a synonym of either *D. variabilis* or *D. parumapertus*.

1960: *D. bifurcatus*; Arthur included this species as "doubtful".

***Dermacentor birulai*** Olenev, 1927.

Dokl. Akad. Nauk. SSSR, A, 14: 223-224.

See notes under the item *D. everestianus*.

***Dermacentor birulai kukunoriensis*** Olenev, 1928.

Nastav. Soliran. Zool. Kolleks.; 16: 84-96.

See notes under the item *D. everestianus*.

***Dermacentor circumguttatus*** Neumann, 1897.

Mém. Soc. Zool. Fr., 10(3-4): 374-384.

1897: *D. circumguttatus*; original description.

1932: *Amblyocentor (Puncticentor) circumguttatus*; Schulze used *Puncticentor* as a subgenus of *Amblyocentor* (s. str.).

1950: *D. (Amblyocentor) circumguttatus*; Pomerantzev stated that *Amblyocentor* is a subgenus of *Dermacentor*.

1951: *D. (Amblyocentor) circumguttatus*; Zumpt synonymized *Puncticentor* along with *Amblyocentor*.

1956: *D. circumguttatus*; Hoogstraal stated that the taxonomy of the group is not clear.

1960: *D. circumguttatus*; Arthur.

1963: *D. (Puncticentor) circumguttatus*; Santos Dias.

1987: *D. circumguttatus*; Matthysse & Colbo.

***Dermacentor circumguttatus cunha-silvai*** Santos-Dias, 1952.

Anais Inst. Med. Trop. Lisboa, 8(4): 531-547.

1952: *D. (P.) circumguttatus cunha-silvai*; original description.

***Dermacentor clathratus*** Koch, 1844.

Arch. Naturgesch., 10(1): 236.

Arthur (1960) consider this species to be *Haemaphysalis concinna*.

***Dermacentor compactus*** Neumann, 1901.

Mém. Soc. Zool. Fr., 14(2-3): 268-269, 338, 345, 357, 361, 364, 366.

1901: *D. compactus*; original description.

1905: *D. auratus compactus*; Neumann, new combination.

1928: *D. compactus*; Sharif.

1933: *Indocentor compactus compactus* and *I. c. tricuspidis*; Schulze (as new genus, new combination, and new subspecies).

1950: *D. compactus*; Anastos considered *Indocentor* as a synonym of *Dermacentor*.

1950: *D. (Indocentor) compactus*; Pomerantzev gives *Indocentor* subgeneric status.

1960: *D. auratus*; Arthur considered *D. compactus* and associated subspecies as "probably variants" of *D. auratus*.

1983: *D. (I.) compactus*; Wassef & Hoogstraal.

***Dermacentor confractus*** (Schulze, 1933).

Z. Parasitenk., 6(3): 420-421, 423, 427, 430.

1933: *Indocentor confractus*; original description. Schulze described the species as *I. confractus* in the text, but *confragus* in the legend for figures.

1960: *D. auratus*; Arthur considered the species as a synonym of *D. auratus*.

***Dermacentor confragus*** (Schulze, 1933).

Z. Parasitenk., 6(3): 420-421, 423, 427, 430.

See notes under the item *D. confractus*.

***Dermacentor coreus*** Itagaki & Noda, 1944.

Ticks Parasitic of Domestic Animals of Asia, 4,12-14, 33-34, 39.

1944: *D. coreus*; original description.

1960: *D. coreus*; Arthur.

1989: *D. coreus*; Filippova & Panova.

There seems to be considerable confusion regarding the original denomination of the species, as several authors have been nominated it in the same book. Itagaki (not Itaki as mentioned in Arthur, 1960, or in Filippova & Panova, 1990) and Noda make the first description in the mentioned pages; Itagaki, Yamaguchi & Noda (pp 60, 65-67, 71-72, 74), and Itagaki, Noda & Yamaguchi (pp: 76, 87-88, 96) provide new data on the species.

**Dermacentor cruentus** Koch, 1844.

Arch. Naturgesch., 19(1): 236-237.

1844: *D. cruentus*; original description.

1897: *D. cruentus*; Neumann.

1960: *D. cruentus*; Arthur considered the species as "doubtful".

**Dermacentor daghestanicus** Olenew, 1928.

Nastav. Soviran. Zoolo. Kollekts., 16: 84-96.

See notes under the item *D. marginatus*.

**Dermacentor daghestanicus silleimi** Schulze, 1933.

Z. Parasitenk., 6(3): 429-430.

See notes under the item *D. marginatus*.

**Dermacentor dentipes** Koch, 1844.

Arch. Naturgesch., 10(1): 236.

See notes under the item *D. marginatus*.

**Dermacentor dispar** Cooley, 1937.

J. Parasit., 23(3): 259-263.

1937: *D. dispar*; original description.

1960: *D. dispar*; Arthur.

1986: *D. dispar*; Yunker, Keirans, Clifford & Easton.

**Dermacentor dissimilis** Cooley, 1947.

Amer. Mus. Novit., 1332: 1-3.

1938: *D. nigrolineatus*; Bequaert, (misidentification, see below).

1947: *D. dissimilis*; original description of Cooley from females and nymphs.

1952: *D. dissimilis*; Kohls & Dalmat described the male, and reported that *D. nigrolineatus* of Bequaert (1938) refers to *D. dissimilis* as evidenced by a female in the Rocky Mountain Laboratory collection bearing the same collection data.

1960: *D. dissimilis*; Arthur.

1986: *D. dissimilis*; Yunker, Keirans, Clifford & Easton.

**Dermacentor electus** Koch, 1844.

Arch. Naturgesch., 10(1): 235.

See notes under the item *D. variabilis*.

**Dermacentor erraticus** Bequaert, 1946.

Ent. Amer., 25(2): 102-175.

See notes under the item *D. albipictus*.

**Dermacentor erraticus albipictus** Bequaert, 1946.

Ent. Amer., 25(2): 104-180.

See notes under the item *D. albipictus*.

**Dermacentor everestianus** Hirst, 1926.

Ann. Mag. Nat. Hist., 17(102): 671.

1926: *D. everestianus*; original description.

1927: *D. birulai*; Olenew (as new species).

1929: *D. birulai*; Olenew.

1929: *D. birulai kukunoriensis*; Olenew (as new subspecies).

1943: *D. (Conocentor) everestianus*; Schulze (as new subgenus).

1950: *D. birulai* and *D. b. kukunoriensis*; Pomerantzev stated that both species are the same.

1960: *D. everestianus*; Arthur redescribed the species, condemned *D. birulai* and *D. b. kukunoriensis* as synonyms of *D. everestianus* and considered that the subgeneric status of *Conocentor* is unwarranted.

1978: *D. everestianus*; Teng.

1989: *D. everestianus*; Filippova & Panova.

***Dermacentor feai*** Supino, 1897.

Atti. Soc. Ven.-Trent. Sci; Nat. Padova, 3(1): 235.

1897: *D. feai*; original description.

1960: *D. feai*; Arthur considered the species as "doubtful" and mentioned that may be *Amblyomma supinae* Neumann, 1905.

***Dermacentor ferrugineus*** Koch, 1844.

Arch. Naturgesch., 10(1): 236.

See notes under the item *D. reticulatus*.

***Dermacentor hahni*** Oudemans, 1936.

Kritisch Historisch Overzicht der Akarologie, Band B III: 796.

The original paper as well as additional data of the species were not available to me. The only reference is from the book "Index-Catalogue of Medical and Veterinary Zoology, Special Publication No. 3, Ticks and Tickborne Diseases; III;- Checklist of Families, Genera, Species, and subspecies of ticks", compiled by Mildred Doss & George Anastos (1977).

***Dermacentor halli*** McIntosh, 1931.

J. Parasit., 18(2): 124.

1931: *D. halli*; original description.

1960: *D. halli*; Arthur.

1978: *D. halli*; Strickland, Gerrish, Hourigan & Schubert.

1986: *D. halli*; Yunker, Keirans, Clifford & Easton.

***Dermacentor hunteri*** Bishopp, 1912.

Proc. Biol. Soc. Wash., 25: 33-36.

1912: *D. hunteri*; original description.

1960: *D. hunteri*; Arthur.

1978: *D. hunteri*; Strickland, Gerrish, Hourigan & Schubert.

1986: *D. hunteri*; Yunker, Keirans, Clifford & Easton.

***Dermacentor imitans*** Warburton, 1933.

Parasitol., 24(4): 558-562.

1933: *D. imitans*; original description.

1960: *D. imitans*; Arthur.

1986: *D. imitans*; Yunker, Keirans, Clifford & Easton.

***Dermacentor indicus*** Supino, 1897.

Atti. Soc. Ven.-Trent. Scii Nat. Padova, 3(1): 236.

1897: *D. indicus*; original description.

1960: *D. indicus*; Arthur included the species as "doubtful".

***Dermacentor kamshadalus*** Neumann, 1908.

Notes Leyden Mus.;, 30(1): 86-88.

1908: *D. variegatus kamshadalus*; original description.

1933: *D. varius kamtschadalus*; Schulze.

1950: *D. variegatus kamtschadalus*; Pomerantzev.

1960: *D. albipictus kamshadalus*; Arthur.

1967: *D. kamshadalus*; Wilkinson stated that "Arthur synonym is unjustifiable...as Pomerantzev list [the species] as a three-host tick".

***Dermacentor latus*** Cooley, 1937.

J. Parasit., 23(3): 261-264.

1937: *D. latus*; original description.

1960: *D. latus*; Arthur.

1986: *D. latus*; Yunker, Keirans, Clifford & Easton.

***Dermacentor longipes*** Supino, 1897.

Nuovi Ixodes della Birmania, 26-27.

1897: *D. longipes*; original description.1960: *D. longipes*; Arthur included this species as "doubtful or insufficiently described".***Dermacentor marginatus*** (Sulzer, 1776).

Abgekürzte Geschichte der Insecten, pp: 245.

1776: *Acarus marginatus*; original description.1805: *Ixodes marginatus*; Fabricius.1844: *Dermacentor dentipes*; Koch (as new species).1897: *D. reticulatus niveus*; Neumann proposed the new subspecies from a fairly number of specimens collected at Cherestanek (north of Teheran, Iran) based on the pale dorsal coloration and on the little dorsal spur at second palpal segment. Some true *D. marginatus* are designated as *D. reticulatus reticulatus* by this author (after Schulze, 1933).1913: *D. marginatus*; Brumpt.1916: *D. reticulatus aulicus*; Hirst (as new subspecies of *D. reticulatus*).1923: *D. niveus*; Yakimov ranked *D. reticulatus niveus* to specific status.1927: *D. marginatus gynaecoides* and *D. marginatus longecoxalis*; Olenev (as new subspecies)1928: *D. niveus daghestanicus*; Olenev.1929: *Cynorhaestes marginatus*; Schulze (as new genus).1933: *D. marginatus lacteolus*; Schulze (as new subspecies).1933: *D. daghestanicus* and *D. daghestanicus silleimi*; Schulze elevated *D. niveus daghestanicus* to the specific level and describes the new subspecies.1933: *D. marginatus*; Schulze considered the synonym of *D. reticulatus aulicus* with *D. marginatus*.1948: *D. aulicus* (in part); Roman & Jehl (as full species).1957: *D. marginatus*; Roman & Sicart considered the possible synonym of *D. niveus* with *D. marginatus*.1957: *D. marginatus*; Starkoff considered that the taxonomic status of *D. m. lacteolus* is unwarranted, as the coloration is only a case of individual variation.1960: *D. niveus*; Arthur synonymized *D. daghestanicus* with *D. niveus*, and agrees with the point of view of Starkoff in synonymizing *D.m. lacteolus* with *D. marginatus*.1962: *D. marginatus sibiricus*; Popov (as new subspecies).1963: *D. (Serdjukovia) marginatus*; Santos Dias (as new subgenus).1974: *D. marginatus*; Bailly-Choumara, Morel, & Rageau mentioned the synonym of *D. niveus* with *D. marginatus*.1987: *D. (S.) marginatus*; Filippova & Panova.1990: *D. marginatus*; Estrada-Peña synonymized *D. dentipes* with *D. marginatus*.1990: *D. marginatus*; A. Estrada-Peña & R. Estrada-Peña synonymized *D. niveus* and *D. daghestanicus* with *D. marginatus* (paper in press and not listed here). The possibility of *D. ushakovae* being a synonym of *D. marginatus* was considered in this paper only on the basis of the original description, because no specimens were available to study.***Dermacentor marginatus daghestanicus*** Lototsky, 1956.

Izvest. Otdel. Est. Nauk, Akad. Nauk Tadzhik SSR (15), pp: 95-98.

See notes under the item *D. marginatus*.***Dermacentor marginatus gynaecoides*** Olenev, 1927.

Dokl. Akad. Nauk SSSR, A, 14: 219-224.

See notes under the item *D. marginatus*.***Dermacentor marginatus lacteolus*** Schulze, 1933.

Z. Parasitenk., 6(3): 424-430.

See notes under the item *D. marginatus*.***Dermacentor marginatus longecoxalis*** Olenev, 1927.

Dokl. Akad. Nauk SSSR, A, 14: 224.

See notes under the item *D. marginatus*.

***Dermacentor marginatus sibiricus*** Popov, 1962.

Ixodid Ticks of Western Siberia, 31, 47-48.

See notes under the item *D. marginatus*.***Dermacentor maturatus*** Castellani & Chalmers, 1919.

Manual of Tropical Medicine, pp: 1341, 1348.

*D. maturatus* is merely a nominal species; No other authors have been used this name.***Dermacentor modestus*** Banks, 1909.

Proc. Ent. Soc. Wash., 10(3-4): 170-171.

See data under the item *D. andersoni*.***Dermacentor montanus*** Filippova & Panova, 1974.

Ent. Obozr., 53(2): 470-476.

1974: *D. (Asiacentor) montanus*; original description.1989: *D. (A.) montanus*; Filippova & Panova.***Dermacentor nigrolineatus*** Packard, 1869.

I. Rep. Peabody Acad. Sci., Appendix, pp: 66.

See data under the item *D. albipictus*.***Dermacentor niveus*** Neumann, 1897.

Mém. Soc. Zool. Fr., 10 (3-4): 365.

See data under the item *D. marginatus*.***Dermacentor niveus daghestanicus*** Olenev, 1928.

Nastav. Sobiran. Zool. Kollekts., 16: 84-96.

See data under the item *D. marginatus*.***Dermacentor nuttalli*** Olenev, 1928.

Nastav. Sobiran. Zool. Kollekts., 16: 84-96.

1928: *D. nuttalli*; original description.1933: *D. nuttalli chacassicum*; Degtyarev (as new subspecies).1950: *D. birulai* and *D. b. kukunoriensis*; Pomerantzev considered this species to be a synonym of *D. nuttalli*.1950: *D. nuttalli*; Pomerantzev considered *D. n. chacassicum* as a synonym of *D. nuttalli*.1960: *D. nuttalli*; Arthur.1989: *D. (Serdjukovia) nuttalli*; Filippova & Panova.***Dermacentor nuttalli chacassicum*** Degtarev, 1934.

Uchen. Zap. Kazansk. Zoo-Vet. Inst., 50(1): 230-231.

See notes under the item *D. nuttalli*.***Dermacentor occidentalis*** Marx in Curtice, 1892.

J. Comp. Med. Vet. Arch., 13(4): 226.

1892: *D. occidentalis*; original description.1897: *D. reticulatus*; Neumann considered *D. occidentalis* to be only a synonym of *D. reticulatus*.1905: *D. reticulatus occidentalis*; Neumann examined the types and reported *occidentalis* as a variety of *reticulatus*.1960: *D. occidentalis*; Arthur.1978: *D. occidentalis*; Strickland, Gerrish, Hourigan & Schubert.1986: *D. occidentalis*; Yunker, Keirans, Clifford & Easton.***Dermacentor parabolicus*** Koch, 1844.

Arch. Naturgesch., 10(1): 236.

See notes under the item *D. reticulatus*.***Dermacentor pardalinus*** Koch, 1844.

Arch. Naturgesch., 10(1): 235.

See notes under the item *D. reticulatus*.

**Dermacentor parumapertus** Neumann, 1901.

Mém. Soc. Zool. Fr., 14: 267-268, 338, 345, 359.

1901: *D. parumapertus*; original description.1905: *D. electus parumapertus*; Neumann.1908: *D. parumapertus*; Banks.1908: *D. parumapertus marginatus*; Banks.1910: *D. parumapertus* and *D. p. marginatus*; Stiles.1912: *D. parumapertus marginatus*; Hooker, Bishopp, & Wood.1938: *D. parumapertus*; Cooley.1960: *D. parumapertus*; Arthur.1978: *D. parumapertus*; Strickland, Gerrish, Hourigan & Schubert.1986: *D. parumapertus*; Yunker, Keirans, Clifford & Easton.**Dermacentor parumapertus marginatus** Banks, 1908.

Tech. Ser; Bur; Ent., U.S; Dep. Agric., 15: 6, 46.

See data under the item *D. parumapertus*.**Dermacentor parvus** Neumann, 1897.

Mém. Soc. Zool. Fr., 10(3-4): 378-379, 384.

See notes under the item *Haemaphysalis intermedia*.**Dermacentor pavlovskyi** Olenev, 1927.

Parasitol., 19(1): 84-85.

1927: *D. pavlovskyi*; original description.1960: *D. pavlovskyi*; Arthur.1989: *D. (Asiacentor) pavlovskyi*; Filippova & Panova.**Dermacentor persicus** Enigk, 1951.

Z. Tropenmed. Parasitol., 2(3): 401.

No adequate description nor figuring of this species seems to have been done. In the original paper, the taxonomic position of the taxon is not mentioned, and no data on the hosts are given.

**Dermacentor pictus** (Hermann, 1804).

Z. Parasitenk., 6(3): 429.

See notes under the item *D. reticulatus*.**Dermacentor planus** Rudow, 1870.

Z. Ges; Naturw. 35(1): 19.

This species is *Rhipicephalus planus*.**Dermacentor pomerantzevi** Serdyukova, 1951.

Dokl. Akad. Nauk SSSR, 79(5): 909-912.

1951: *D. pomerantzevi*; original description.1960: *D. pomerantzevi*; Arthur.1963: *D. (Serdjukovia) pomerantzevi*; Santos Dias.1989: *D. (S.) pomerantzevi*; Filippova & Panova.**Dermacentor pulchellus** Gerstäcker, 1873.Baron Carl Claus von der Decken's Reisen in Ost-Afrika, v. 3,  
Wissenschaftliche Ergebnisse, 2 Abt.: 467-468.The species is currently *Rhipicephalus pulchellus*.**Dermacentor puncticollis** Koch, 1844.

Arch. Naturgesch., 10(1): 236.

1844: *D. puncticollis*; original description.1960: *D. puncticollis*; Arthur consider this species as "doubtful".**Dermacentor raskemensis** Pomerantzev, 1946.

Opred. Faune SSSR, Zool. Inst. Akad. Nauk. SSSR, 26:.

1946: *D. raskemensis*; original description.1960: *D. raskemensis*; Arthur.1971: *D. raskemensis*; Dhanda, Kulkarni & Pratt.

1971: *D. ushakovae* (misidentification): Dhanda, Kulkarni & Pratt. Filippova & Panova, in the description of *D. ushakovae*, stated that Dhanda et al. used several female specimens of *D. ushakovae* in the description of *D. raskemensis*.  
 1989: *D. (Serdjukovia) raskemensis*; Filippova & Panova.

***Dermacentor reticulatus* (Fabricius, 1794).**

Entomologia Systematica, V: 428.

1776: *Acarus marginatus* (misidentification); Sulzer (see Arthur, 1960).

1794: *Acarus reticulatus*; original description.

1804: *Cynorhaestes pictus*; Hermann (as new species).

1804: *Ixodes reticulatus*; Latreille.

1826: *Ixodes marmoratus*; Risso (as new spscies).

1829: *Crotonus variegatus*; Duméril.

1844: *D. reticulatus*; Koch.

1844: *D. albicollis*, *D. pardalinus*, *D. ferrugineus*; Koch.

1844: *Ixodes pictus*; Gervais.

1856: *Ixodes holsatus*; Kolenati (as new species).

1882: *Pseudoixodes holsatus*; Haller (as new species).

1888: *Haemaphysalis marmorata*; Berlese (as new species).

1890: *Haemaphysalis marmorata*; Canestrini.

1893: *Ixodes hungaricus*; Karpelles (as new species).

1897: *D. reticulatus*; Neumann.

1911: *D. reticulatus*; Neumann synonymized *I. hungaricus* Karpelles with *D. reticulatus*.

1929: *Cynorhaestes pictus*; Schulze rejected the generic and specific name on the grounds that Fabricius's species is an *Ixodes*; Following this paper, several Soviet workers have named the species as *Cynorhaestes pictus* or, afterwards, *Dermacentorites marginatus* and *Dermacentor pictus*.

1931: *Dermacentorites pictus*; Olenev.

1933: *D. pictus*; Schulze.

1935: *D. pictus*; Schulze.

1950: *D. pictus*; Pomerantzev.

1956: *D. reticulatus*; Hoogstraal.

1960: *D. reticulatus*; Arthur; considered *albicollis*, *pardalinus*, and *ferrugineus* as doubtful species, but possibly synonyms of *D. reticulatus*; I have recently studied the female type of *D. ferrugineus*, and found conspecific with *D. reticulatus* (Estrada-Peña, 1990).

1963: *D. (Dermacentor) reticulatus*; Santos Dias.

1989: *D. (D.) reticulatus*; Filippova & Panova.

***Dermacentor reticulatus aulicus* Hirst, 1916.**

Ann. Mag. Nat. Hist., 8(17): 308.

See notes under the item *D. marginatus*.

***Dermacentor reticulatus niveus* Neumann, 1897.**

Mém Soc. Zool. Fr., 10(3-4): 365.

See data under the items *D. marginatus* and *D. reticulatus*.

***Dermacentor reticulatus occidentalis* Marx, in Curtice, 1892.**

J. Comp. Med. Vet. Arch., 13(4): 226.

See notes under the item *D. occidentalis*.

***Dermacentor rhinocerinus* (Denny, 1843).**

Ann. Mag. Nat. Hist., 12(78): 313, 316.

1778: *Acarus rhinocerotis*; de Geer; The specific name of *rhinocerotis* de Geer used for this species, actually refers to a distinct species in the genus *Amblyomma* (see Donitz, 1910).

1843: *Ixodes rhinocerinus*; Denny.

1844: *Ixodes rhinocerotis*; Gervais in Walckenaer.

1844: *Amblyomma rhinocerotis*; Koch.

1844: *Amblyomma rhinocerinus*; Koch.

1873: *Dermacentor rhinocerotis*; Gerstaecker.

1897: *D. rhinocerotis*; Neumann.

- 1907: *D. rhinocerotis permaculatus*; Neumann (as new subspecies).  
 1911: *D. rhinocerotis rhinocerotis*; Neumann (new combination).  
 1911: *D. rhinocerotis permaculatus*; Neumann.  
 1932: *Amblyocentor rhinocerinus*; Schulze.  
 1950: *Dermacentor (Amblyocentor) rhinocerinus*; Pomerantzev.  
 1956: *Dermacentor (Amblyocentor) rhinocerinus*; Hoogstraal.  
 1960: *Dermacentor (Amblyocentor) rhinocerinus*; Arthur mentioned that "...All investigators subsequent to Neumann, with the exception of Tonelli-Rondelli (1930) have disregarded the varietal concept of Neumann and have considered these characters to be cases of intraspecific variation". I recently examined 96 specimens of *D. rhinocerinus* and *D. rhinocerinus permaculatus* and found them conspecific (paper in press and not listed here).  
 1987: *D. rhinocerinus*; Matthysse & Colbo.

***Dermacentor rhinocerinus otis*** Wilson, 1950.

Rep. Vet. Dep. Uganda Protect.: 23.

1950: *D. rhinocerinus otis*; original description.

***Dermacentor rhinocerinus schillingsi*** Jacob, 1924.

Z. Morph. Okol. Tiere, 1(2): 370.

1924: *D. rhinocerinus schillingsi*; original description.

***Dermacentor rhinocerotis*** de Geer, 1778.

Mémoire pour servir à l'Histoire Naturelle des Insectes, V. VII: 160-161.  
 See notes under the item *D. rhinocerinus*.

***Dermacentor rhinocerotis arangis*** Lewis, 1934.

Bull. Dep. Agric. Colony Protect. Kenya, 7: 39, 44.

1934: *D. rhinocerinus arangis*; original description.

***Dermacentor rhinocerotis permaculatus*** Neumann, 1907.

Wiss; Ergebn. Schwed. Zool. Exped. Kilimandjaro, Meru Deutsch-Ostafrikas, Abt. 20: Arachnoidea (2): 23.  
 See notes under the item *D. rhinocerinus*.

***Dermacentor rosmari*** Ass, 1935.

Z. Parasitenk., 7(5): 601-607.

1935: *D. rosmari*; original description (only nymphs).

1950: *Hyalomma aegyptium*; Pomerantzev considered this species to be a synonym of *Hyalomma aegyptium*.

1956: *D. rosmari*; Hoogstraal stated that the systematic position of the species is uncertain and that the synonym of Pomerantzev is hardly convincing on the basis of the original description and figures.

1960: *D. rosmari*; Arthur considered this species as "doubtful".

***Dermacentor salmoni*** Stiles, 1910.

Bull. Hyg. Lab. U.S; Publ. Hlth. Mar; Hosp. Serv., 62: 5-10, 21-28, 36-37, 51-60.

See data under the item *D. albipictus*.

***Dermacentor silvarum*** Olenev, 1931.

Z. Parasitenk., 4(1): 128-133.

1931: *D. silvarum*; original description.

1933: *D. silvarum ablutus*; Schulze.

1960: *D. silvarum*; Arthur.

1962: *D. silvarum kemerovi*; Popov.

1989: *D. (Serdjukovia) silvarum*; Filippova & Panova.

***Dermacentor silvarum ablutus*** Schulze, 1933.

Z. Parasitenk., 6(3): 425-427.

See notes under the item *D. silvarum*.

***Dermacentor silvarum kemerovi*** Popov, 1962.

Ixodid Ticks of Western Siberia, pp: 31, 47, 49.

See notes under the item *D. silvarum*.

***Dermacentor sinicus* Schulze, 1931.**

Sber; Abh. Naturf. Ges; Rostock, 3: 61-63.

1931: *D. sinicus*; original description.

1932: *D. s. sinicus* and *D. s. pallidior*; Schulze (as new combination and new subspecies).

1960: *D. sinicus*; Arthur rejected the subspecies *pallidior*, as a case of variation in scutal coloration.

1978: *D. sinicus*; Teng.

1982: *D. sinicus*; Teng.

***Dermacentor sinicus pallidior* Schulze, 1932.**

Sber; Abh. Naturf. Ges; Rostock, 3: 63-64.

See notes under the item *D. sinicus*.

***Dermacentor steini* (Schulze, 1933).**

Z. Parasitenk., 6(3): 422-423, 427, 430.

1933: *Indocentor steini*; original description.

1933: *I. steini leviculus*; Schulze.

1939: *I. ater*; Schulze described this species; The same specimen had been erroneously identified by Schulze (1933: 421, fig. 6) as *I. atrosignatus* (see notes in Wassef & Hoogstraal, 1986).

1960: *D. auratus*; Arthur considered *D. steini* as a "doubtful species...probably *D. auratus*".

1986: *D. (I.) steini*; Wassef & Hoogstraal.

***Dermacentor steini leviculus* Schulze, 1933.**

Z. Parasitenk., 6(3): 422-423, 427.

See notes under the item *D. steini*.

***Dermacentor taiwanensis* Sugimoto, 1935.**

Anim. Ind. Formosa, 4(2): 13.

1935: *D. taiwanensis*; original description.

1936: *D. taiwanensis*; Sugimoto.

1937: *D. taiwanensis*; Sugimoto.

1944: *D. taiwanensis*; Toumanoff.

1960: *D. taiwanensis*; Arthur.

1966: *D. taiwanensis*; Maa & Kuo (see Wassef & Hoogstraal, 1986).

1978: *D. (Indocentor) taiwanensis*; Teng.

1981: *D. (I.) taiwanensis*; Kitaoka & Suzuki.

1986: *D. (I.) taiwanensis*; Wassef & Hoogstraal.

***Dermacentor triangulatus* Neumann, 1901.**

Mém. Soc. Zool. Fr., 14(2-3): 266, 338, 345, 361.

1901: *D. triangulatus*; original description.

1935: *D. triangulus*; Aragao.

1960: *D. triangulatus*; Arthur considered the species as "doubtful".

A. Guglielmone (INTA, Salta, Argentina) (correspondence) stated that (translated) "...there are not *Dermacentor* specimens at Museo de Ciencias Naturales Bernardino Rivadavia (Buenos Aires)...and it may be possible that this genus have not representatives at Argentina nor South America".

***Dermacentor triangulatus* Aragao, 1935.**

Mem. Inst. Oswaldo Cruz, 30(3): 519-520, 530-531.

See notes under the item *D. triangulatus*.

***Dermacentor variabilis* (Say, 1821).**

J. Acad. Nat. Sci. Philad., 2(1): 77-78.

1821: *Ixodes variabilis*; original description of an apparent *Dermacentor* tick.

1844: *Dermacentor electus*; Koch (as new species).

1869: *Ixodes naponensis*; Packard (as new species).

1872: *I. quinquestriatus*; Fitch (as new species). No sex but strong suggestion of it being the female of *D. variabilis* (see Arthur, 1960).

1872: *I. robertsoni*; Fitch (as new species; see Arthur, 1960).  
1874: *I. bovis*; Lintner; According to the figures this was *D. variabilis* (see Bequaert, 1946; Arthur, 1960).  
1897: *D. americanus*; Neumann.  
1901: *D. electus*; Koch.  
1908: *D. variabilis*; Banks.  
1912: *D. variabilis*; Hooker, Bishopp & Wood.  
1933: *D. venustus*; Mcleod.  
1938: *D. variabilis*; Cooley.  
1946: *D. variabilis*; Bequaert.  
1960: *D. variabilis*; Arthur.  
1978: *D. variabilis*; Strickland, Gerrish, Hourigan & Schubert.  
1986: *D. variabilis*; Yunker, Keirans, Clifford & Easton.

***Dermacentor variabilis parumapertus*** Neumann, 1911.  
Das Tierrich, 26: 101.  
See data under the items *D. parumapertus*.

***Dermacentor variegatus*** Marx & Neumann, in Neumann, 1897.  
Mém. Soz. Zoo. Fr.;, 10(3-4): 367-370.  
See data under the item *D. albipictus*.

***Dermacentor variegatus kamtschadalus*** Neumann, 1908.  
Notes Leyden Mus.;, 30(1): 86-88.  
See notes under the items *D. albipictus* and *D. kamtschadalus*.

***Dermacentor varius*** Schulze, 1933.  
Z. Parasitenk., 6(3): 424.  
See data under the items *D. albipictus*.

***Dermacentor varius kamtschadalus*** Schulze, 1933.  
Z. Parasitenk., 6(3): 424.  
See notes under the items *D. albipictus* and *D. kamtschadalus*.

***Dermacentor venustus*** Banks, 1908.  
Tech. Ser; Bur; Ent. U.S; Dep. Agric., 15: 46-47.  
See notes under the item *D. andersoni*.

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