

**ANNOTATED CHECK-LIST OF APHODIINAE (SCARABAEIDAE :  
COLEOPTERA) FROM INDIA**

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**INTRODUCTION**

The dung beetles belonging to subfamily Aphodiinae are usually coprophagous in habit and complete their life cycle in dung deposits. Some of the species are myrmecophilous and also inhabit the mammal nests. They play an important role in decomposition of dung from soil surface and thus making the environment clean and earning the name of "Nature's Scavengers". These beetles are characterized by the nine-segmented antennae and club 3-segmented; labrum and mandibles concealed by the clypeus; posterior spiracles situated in the membrane between dorsal and ventral segments; middle coxae almost contiguous and hind tibiae with two terminal spurs and elytra completely covering the abdomen.

The Aphodiinae fauna of the World is represented by about 1,200 species. The present knowledge about the Indian Aphodiinae is due to initial efforts made by Linnaeus (1767) and Fabricius (1781, 1787, 1792, 1801) and upto nineteenth century only 32 species of Aphodiinae were described by various workers namely Dejean (1833), Fairmaire (1896, 1897), Gestro (1891), Harold (1859, 1860, 1861, 1862, 1867, 1868, 1869, 1874, 1881), Klug (1855), Lansberg (1866), Motschulsky (1863), Reiche (1863, 1869), Roth (1847), Walker (1858), Wassmann (1899), Waterhouse (1875, 1876), Westwood (1847), Wiedemann (1823) and Wiedemann & Germar (1821). Later on in the present century Arrow (1909), Balthasar (1933, 1935, 1937, 1939, 1940, 1941 (a & b), 1946, 1955, 1963, 1965, 1967, 1973), Benard (1917, 1930), Boucomont (1935), Champion & Wassmann (1923), Clouet (1901), Johnson (1978), Koshantschikov (1916), Mittal (1993), Paulian (1934, 1936 a & b), Petrovitz (1958, 1961 a & b, 1962 a & b, 1963 a & b, 1964, 1965, 1967, 1968 a & b, 1970, 1973, 1975, 1976), Pittino (1983, 1984, 1988), Pittino and Mariani (1986), Schmidt (1907, 1908, 1909, 1910, 1911, 1916, 1923), Stebnicka (1981, 1983, 1989), Tangelder and Krikken (1982), Wassmann (1902, 1911, 1918, 1923) described 101 species from India. An analysis of the fauna of Indian Aphodiinae described during the different period indicate that most of the species were described from 1901 to 1995 (Table 1) and analysis of contributions made by different

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coleopterists indicates that Petrovitz, Schmidt, Tangelder and Krikken, Balthasar, Wassmann, Harold, Pittino and Mariani and Mittal were the significant contributors, who described maximum species of Indian Aphodiinae.

**Table 1** : Number of Indian species of Aphodiinae described during different periods

Sl. No	Period		Number of species described
	From	To	
1	1751	- 1800	5
2.	1801	- 1850	9
3.	1851	- 1900	18
4.	1901	- 1950	38
5.	1951	- 1995	63

#### CHECK LIST OF INDIAN FAUNA

Subfamily APHODIINAE Leach, 1815

Tribe APHODIINI Leach, 1815

Genus *Aphodius* Illiger, 1798

*Cytoderhinus* Seabra, 1909

*Digonorhinus* Seabra, 1909

*Hemicyclorhinus* Seabra, 1909

Subgenus *Acrossus* Mulsant, 1842

*Aphodius (Acrossus) angustiarum* Balthasar, 1967

*hingstoni* Petrovitz, 1976 : Tangu; Sikkim

*simlaicus* Petrovitz, 1970 : Simla;

Himachal Pradesh

ab. *rufipennis* Petrovitz, 1976 : Tangu; Sikkim

A. (A.) *emodus* Petrovitz, 1976 : Lachen; Sikkim

A. (A.) *opacipennis* A. Schmidt, 1910a : Sikkim

A. (A.) *ritsemai* A. Schmidt, 1909a : Sikkim

A. (A.) *ustulatus* Harold, 1862 : North-east India;  
Chakratta, Kedarnath; Uttar Pradesh.

Subgenus *Aganocrossus* Reitter, 1895*Aphodius* (*Aganocrossus*) *amoenus* Boheman, 1857*centralis* Harold, 1868*centromaculatus* Germar, 1869ab. *fuscus* Petrovitz, 1962ab. *impugnans* A. Schmidt, 1907ab. *pallidicornis* Walker, 1858 : Chennai; Tamil NaduA. (A.) *khuntianus* Balthasar, 1940 : Khunti; Himachal Pradesh*urostigmoides* Balthasar, 1939Subgenus *Alocoderus* A. Schmidt, 1913*Aphodius* (*Alocoderus*) *decrepidus* Petrovitz, 1975 : India*patricius* Petrovitz, 1975A. (A.) *teyrovskyi* Balthasar, 1935 : Sikkim*milvus* Balthasar, 1955*pedongensis* Paulian, 1936a : Darjeeling;  
West BengalSubgenus *Aphodius* Illiger, 1798*Aphodius* (*S. Str.*) *elongatulus* Fabricius, 1801*chinensis* Harold, 1861*cruentus* Reiche, 1869 : Bengal*testaceus* Germar, 1813*tuberifrons* Fairmaire, 1889A. (*S. Str.*) *fasciger* Harold, 1881 : Darjeeling , West Bengalab. *infestus* A. Schmidt, 1907 : Assamab. *schenklingi* A. Schmidt, 1907 Khasis; Meghalayaab. *sexsignatus* A. Schmidt, 1907 : SikkimA. (*S. Str.*) *irregularis* Westwood, 1839 : Himalaya*basalis* Reiche, 1863 : IndiaSubgenus *Balthasarianus* Paulian, 1934*Aphodius* (*Balthasarianus*) *fruhstorferi* Petrovitz, 1970

Darjeeling; West Bengal

A. (*B.*) *gregori* Balthasar, 1941b : Sikkim.*abditus* Petrovitz, 1970 : Darjeeling; West BengalA. (*B.*) *nainiensis* Petrovitz, 1963a Bhimtal, Nainital;  
Uttar PradeshA. (*B.*) *pilosus* Harold, 1874 : India

- Subgenus ***Blackburneus*** A. Schmidt, 1913  
*Aphodius* (*Blackburneus*) *minutissimus* A. Schmidt, 1908 :  
 Hulikal, Nilgiri; Tamil Nadu  
 A. (B.) *stebnickae* Pittino, 1988 : Nagpur; Maharashtra
- Subgenus ***Bodilus*** Mulsant and Rey, 1869  
*Aphodius* (*Bolidus*) *liesenfeldti* Petrovitz, 1958 : Dehradun;  
 Kumaon; Uttar Pradesh
- Subgenus ***Emadiellus*** A. Schmidt, 1913  
*Aphodius* (*Emadiellus*) *rufopustulatus* Wiedemann, 1823 :  
 Bengal
- Subgenus ***Erytodes*** A. Schmidt, 1916  
*Aphodius* (*Erytodes*) *confirmatus* A. Schmidt, 1916 :  
 Chennai; Tamil Nadu
- Subgenus ***Euorodalus*** Dellacasa, 1983  
*Aphodius* (*Euorodalus*) *himalayanus* W. Koshantschikov,  
 1916 : Kulu, Himachal Pradesh
- Subgenus ***Koshantschikovius*** A. Schmidt, 1913  
*Aphodius* (*Koshantschikovius*) *andrewesi* A. Schmidt, 1908 :  
 Belgaum; Karnataka  
 A. (K.) *nagporensis* Petrovitz, 1968a :  
 Nagpur; Maharashtra  
 A. (K.) *strandi* Balthasar, 1935 : Nagpur; Maharashtra
- Subgenus ***Labarrus*** Mulsant and Rey, 1869  
*Aphodius* (*Labarrus*) *lividus* Olivier, 1789 : Widely  
 distributed in India, Haryana, Uttar Pradesh,  
 Himachal Pradesh, Rajasthan and Andaman  
 (Chandra, 1992)  
*bilituratus* Marsham, 1802  
*cincticulus* Hope, 1846  
*discus* Wiedemann, 1823  
*fimetifex* Gistel, 1857  
*hircinus* Gistel, 1857  
*maculicollis* Montrouzier, 1860  
*obliteratus* Mannerheim, 1833  
*osoletus* Fabricius, 1801  
*sequens* Walker, 1858  
*spilopterus* Germar, 1848

- saturalis* Fabricius, 1792  
*saturalis* Schonherr, 1833  
*verpertinus* Ponzer, 1799
- ab. *anachoreta* Fabricius, 1801  
 ab. *limbatus* Wiedemann, 1821  
 ab. *limicola* Ponzer, 1798  
 ssp. *matusitai* Nakane, 1961
- Subgenus ***Loboparius*** A. Schmidt, 1913  
*Aphodius* (*Loboparius*) *immarginatus* A. Schmidt, 1907  
*crossulus* Fairmaire, 1893  
*vitalisi* Boucomont, 1921  
 ssp. *cordieri* Boucomont, 1921  
 ssp. *kumaoensis* Petrovitz, 1962a; Dehradun;  
 Siwalik hills, 3000 m above; Uttar Pradesh  
 ssp. *malabaricus* Petrovitz, 1962a : Mahe, Malabar;  
 Kerala  
*minimus* Reiche, 1863  
 A. (L.) *nathani* Johnson, 1978 Anamalai Hill;  
 Tamil Nadu  
 A. (L.) *schereri* Petrovitz, 1963a : Nainital, Bhimtal; Uttar  
 Pradesh
- Subgenus ***Megatelooides*** Landin, 1974  
*Aphodius* (*Megatelooides*) *bostricoides* Harold, 1860 : North-  
 East India
- Subgenus ***Mendidaphodius*** Reitter, 1901  
*Aphodius* (*Mendidaphodius*) *pseudoadustus* Petrovitz, 1958  
 Thar-desert; Rajasthan & Gujrat
- Subgenus ***Mesontoplatys*** Motschulsky, 1860  
*Aphodius* (*Mesontoplatys*) *dorsalis* Klug, 1855 : India  
*probes* Peringuey, 1901  
*tenuitarsis* Fairmaire, 1897  
 ab. *indorsalis* Endrodi, 1960  
 ab. *maoensis* Endrodi, 1964  
 A. (M.) *mungo* Balthasar, 1946 : Chennai, Tamil Nadu  
 A. (M.) *ovatulus* Harold, 1861 : East India  
*ovatulus* Reiche, 1861  
 ab. *numerosus* A. Schmidt, 1913

- A. (M.) *scutatus* Petrovitz, 1961b : Kerala  
 Subgenus *Neocalaphodius* Bordat, 1988  
*Aphodius* (*Neocalaphodius*) *moestus* Fabricius, 1801 : India, widely distributed. Andaman (Chandra, 1992)  
*investigator* Reiche, 1862  
*madagascariensis* Dejean, 1833  
*madagascariensis* Harold, 1859  
*mutans* Walker, 1858  
*subvittatus* Fairmaire, 1896  
 ab. *connectena* Endrodi, 1960  
 ab. *innotatus* Endrodi, 1960  
 Subgenus *Oxyaphodius* Balthasar, 1965  
*Aphodius* (*Oxyaphodius*) *sikkimensis* Balthasar, 1965 : Tumlong; Sikkim  
 Subgenus *Paradidactylia* Balthasar, 1937  
*Aphodius* (*Paradidactylia*) *brivioi* Petrovitz, 1961b : Machilipatnan; Kistna; Andhra Pradesh  
 A. (P.) *dehradunensis* Petrovitz, 1961b : Dehradun, U. P.  
 A. (P.) *haafi*, Petrovitz, 1964 : Orissa  
 Subgenus *Paremadus* Nakane, 1976  
*Aphodius* (*Paremadus*) *mahriensis* Stebnicka, 1983 : Mahri; Himachal Pradesh  
 A. (P.) *schawalleri* Stebnicka, 1989 : Jammu & Kashmir  
 A. (P.) *zopilae* Stebnicka, 1981 : Ladakh, Zojila, Jammu & Kashmir  
 Subgenus *Phalacronothus* Motschulsky, 1859  
*Emadus* Mulsant and Rey, 1869  
*Paragolius* Balthasar, 1946  
*Aphodius* (*Phalacronothus*) *avunculus* Balthasar, 1946 : Chennai; Tamil Nadu  
 A. (P.) *carinulatus* Motschulsky, 1863 : India  
 Subgenus *Pharaphodius* Reitter, 1892  
*Aphodius* (*Pharaphodius*) *acutus* A. Schmidt, 1908 : South India  
 A. (P.) *cornutus*, Wiedemann, 1823 : Bengal  
 A. (P.) *costatulus* A. Schmidt, 1908 : Belgaum; Karnataka  
*dindigalensis* Balthasar, 1951b : Dindigal; Tamil Nadu

- subpilosus* Petrovitz, 1965 : Vinukonda; D. Kistna
- A. (P.) *crenatus* Harold, 1862 : India; widely distributed; Haryana, Uttar Pradesh, Himachal Pradesh, Andaman (Chandra, 1992)
- buphalinus* Eschscholtz, 1833
- crenatus* Dejean, 1833
- pubiventris* Motschulsky, 1869
- A. (P.) *indicus* Petrovitz, 1958 : Coimbatore; Tamil Nadu
- A. (P.) *jodhpurensis* Petrovitz, 1958 : Barmer. Thar-Desert; Rajasthan
- A.(P.) *marginellus* Fabricius, 1781 : South India
- assimilis* Megerle, 1833
- attritus* Balthasar, 1933
- lucidus* Dejean, 1862
- marginellus* Schuppel, 1833
- A. (P.) *perfidus* A. Schmidt, 1908 : Belgaum; Karnataka
- Subgenus ***Plagiogonus*** Mulsant, 1842
- Eccoaptaphodius*** Iablokov, 1964
- Oloperus*** Mulsant and Rey, 1869
- Aphodius* (*Plagiogonus*) *oberthuri* Paulian, 1936a : Darjeeling; West Bengal
- ab. *nigrescens* Paulian, 1936a : Darjeeling; West Bengal
- ab. *rubricatus* Paulian, 1936a : Darjeeling; West Bengal
- A. (P.) *palea* Balthasar, 1967 : Darjeeling; West Bengal
- A. (P.) *ramamiensis* Stebnicka, 1981 : Raman, Darjeeling; West Bengal
- Subgenus ***Pleuraphodius*** A. Schmidt, 1913
- Aphodius* (*Pleuraphodius*) *impudicus* Fabricius, 1801 : India
- A. (P.) *lewisi* Waterhouse, 1875 : South India
- Subgenus ***Teuchestes*** Mulsant, 1842
- Aphodius* (*Teuchestes*) *analisis* Fabricius, 1787 : India
- cinctipennis* Chevrolat, 1869
- ab. *niger* Landin, 1974
- ab. *sorex* Fabricius, 1792 : India
- beckeri* Mader, 1938

- Subgenus *Trichaphodius* A. Schmidt, 1913  
*Gilletianus* Balthasar, 1933  
*Neoheptaolacus* Paulian & Villiers, 1939  
*Schmidtaphodius* Paulian, 1942  
*Trichaphodioides* Paulian, 1942
- Aphodius* (*Trichaphodius*) *assamensis* Petrovitz, 1976 :  
 Patkai Mt., Assam
- A. (T.) *costatulus* A. Schmidt, 1908 : Belgaum, Karnataka  
*subpilosus* Petrovitz, 1965 : Vinukonda, Andhra Pradesh
- A. (T.) *humilis* Roth, 1851 : India  
*lanuginosus* Perringuey, 1901
- ab. *decoloratus* Endrodi, 1957  
 ab. *flavus* Endrodi, 1955  
 ab. *fumosulus* Endrodi, 1957  
 ab. *luctuosus* Endrodi, 1957  
 ab. *nigrellus* Endrodi, 1957  
 ab. *ovatus* Endrodi, 1957  
 ab. *partitus* Endrodi, 1957  
 ab. *punctiger* Endrodi, 1957
- ssp. *hindustanicus* Balthasar, 1935 : India
- A. (T.) *kazirangensis* Stebnicka, 1981 : Kaziranga; Assam
- A. (T.) *moorei* Paulian, 1936 : South India
- A. (T.) *reichei* Harold, 1859 : South India  
*binonatus* Dalman, 1833
- A. (T.) *segmentaroides* A. Schmidt, 1909a : East India
- Subgenus *Trichonotulus* Bedel, 1911  
*Trichonotus* Mulsant & Rey, 1842
- Aphodius* (*Trichonotulus*) *biseriatus* A. Schmidt, 1908 :  
 India
- A. (T.) *castersi* Paulian, 1936a : Tiruchchirapalli, Tamil Nadu  
*echinatus* Petrovitz, 1961 : Bengal
- A. (T.) *coimbatorensis* Balthasar, 1973 : Coimbatore;  
 Tamil Nadu
- Aphodius* *campestris* Mittal, 1993 : Dehradun; U. P. ;  
 Kurukshetra; Haryana

- A. *devabhumi* Mittal, 1993 : Badrinath; U. P.  
 A. *mussooriensis* Mittal, 1993 : Mussoorie; U. P.  
 A. *parvatia* Mittal, 1993 : Gorikund, Kedarnath; U. P.  
 A. *rugosicapita*, Mittal, 1993 : Kalpa, H. P. ;  
 Gorikund, U. P.
- Genus ***Oxyomus*** Dejean, 1833  
***Amidorinus*** W. Koshantschikov, 1912  
***Oxyomus*** Castelnau, 1840  
***Oxyomus*** Erichson, 1844  
***Oxyomus*** Eschscholtz, 1833  
***Oxyomus*** Stephens, 1839  
***Renaudius*** Balthasar, 1951
- Oxyomus* *cameratus* A. Schmidt, 1908 : Hulikal, Nilgiri;  
 Tamil Nadu
- O.* *nibigenus* Petrovitz, 1968 : India  
*O.* *simillimus* A. Schmidt, 1908 : Nilgiri Hills; Tamil  
 Nadu
- Tribe CORYTHODERIINIA A. Schmidt, 1910
- Genus ***Chaetopisthes*** Westwood, 1847
- Subgenus ***Chaetopisthes*** Westwood, 1847
- Chaetopisthes* (*s. str.*) *fulvoides* Tangelder and Krikken : Chotanagpur,  
 Nowatoli; Bihar
- C. (s. str.)* *fulvus* Westwood, 1847 : Mhow, Malwa; Madhya  
 Pradesh  
*arrowi* Balthasar, 1941
- C. (s. str.)* *latipes* Tangelder and Krikken 1982 : Faizabad;  
 Uttar Pradesh
- C. (s. str.)* *oberthuerei* Tangelder and Krikken, 1982 : Ramnad,  
 Tamil Nadu
- Subgenus ***Chaetopisthides*** Wassmann, 1918
- Chaetopisthes* (*Chaetopisthides*) *popei* Tangelder and Krikken,  
 1982 : Chikkaballapuro; Karnataka
- C. (C.)* *sulciger* Wassmann, 1899 : Ahmed Nagar;  
 Maharashtra  
*tibialis* Wassmann, 1923 : Khandesh, S. India
- Subgenus ***Miochaetopisthes*** Tangelder & Krikken 1982
- Chaetopisthes* (*Miochaetopisthes*) *cinnatus*

- Tangelder and Krikken, 1982 : Chipurupalle;  
Andhra Pradesh
- Subgenus *Neochaetopisthes* Wassmann, 1918
- Chaetopisthes* (*Neochaetopisthes*) *angustipes*, Tangelder and  
Krikken, 1982 : Nilgiri Hills; Tamil Nadu
- C. (N.) assmuthi* Wassmann, 1911 : Khandala;  
Maharashtra
- C. (N.) brevipes* Wassmann 1923 : Nowatoli, Chotanagpur,  
Bihar
- C. (N.) brunneus* Wassmann, 1918 : Kirkee, Poona;  
Maharashtra
- C. (N.) heimi* Wassmann, 1902 : Wallon, Ahmad Nagar,  
Maharashtra
- C. (N.) longulus* Wassmann, 1923 : Kumaon, Tanakpur;  
Uttar Pradesh
- C. (N.) meridionalis* Tangelder and Krikken, 1982 :  
Kodaikanal; Tamil Nadu
- C. (N.) saetiger* Tangelder & Krikken, 1982 : Faizabad;  
Uttar Pradesh
- C. (N.) semisulcatus* Tangelder and Krikken 1982 :  
Faizabad; Uttar Pradesh
- C. (N.) septentrionalis* Tangelder and Krikken, 1982 :  
Gurdaspur; Punjab
- C. (N.) simplices* Gestro, 1891 : North India
- C. (N.) ventriosus* Tangelder and Krikken, 1982 : Namkun,  
Ranchi; Bihar
- Genus *Corythoderus* Klug, 1845
- Subgenus *Eurycorythoderus* Wassmann, 1918
- Corythoderus* (*Eurycorythoderus*) *gibbiger* Wassmann, 1899 :  
Sangammer, Ahmad Nagar; Maharashtra
- assmuthi* Wassmann, 1918
- fossiger*, Wassmann, 1918
- Subgenus *Stenocorythoderus* Wassmann, 1918
- Corythoderus* (*Stenocorythoderus*) *braminus* Wassmann, 1918 :  
Anand; Gujrat
- Genus *Termitopisthes* Wassmann, 1918
- Termitopisthes* *forticulus* Tangelder and Krikken, 1982 : Kumaon,  
Haldwani; Uttar Pradesh

- T. kistneri* Tangelder and Krikken, 1982 : Haldwani, Tanakpur; Uttar Pradesh
- T. parallelus* Wassmann, 1923 : Dehradun; Uttar Pradesh
- T. schmidtii* Champion, 1923 : Kumaon, Tanakpur; Uttar Pradesh
- T. submissus* Tangelder and Krikken, 1982 Kumaon, Haldwani; Uttar Pradesh
- T. wasmanni* A. Schmidt, 1911 : Chotanagpur; Bihar
- laticollis* Wassmann, 1918 : Bangalore; Karnataka
- nobilis* Wassmann, 1918 Bangalore, Karnataka
- Tribe EUPARIINI A. Schmidt, 1910
- Genus *Ataenius* Harold, 1867
- Auperia* Chevrolat, 1864
- Auperia* Duval, 1856
- Brancoataenius* Paulian, 1979
- Euparia* Burmeister, 1877
- Euparia* Erichson, 1847
- Hexalus* Mulsant & Rey, 1870
- Oxyomus* Blanchard, 1843
- Stenataenius* Chalumeau, 1982
- Ataenius dentatus* W Koshantschikov, 1916 Andaman Islands, A & N Islands
- Genus *Dialytes* Harold, 1869
- Dialytes punctatus* A. Schmidt, 1911 : Andaman Islands, A & N Islands
- Genus *Odontolytes* W. Koshantschikov, 1916
- Odontolytes andamanensis* W Koshantschikov, 1916 : Andaman Islands, A & N Islands
- Genus *Sybacodes* Fairmaire, 1896
- Sybacodes lutulentus* Fairmaire, 1896 : India
- Tribe PSAMMODIINI Mulsant, 1842
- Genus *Psammadius* Fallen, 1807
- Psammadius* Heer, 1841
- Psammadius* Castelnau, 1840
- Psammadius* Gyllenhal, 1808
- Psammadius ovatus* Pittino, 1983 : Guwahati; Assam
- Tribe RHYSSEMINI Pittino and Mariani, 1986

- Genus *Platytomus* Mulsant, 1842  
*Platytomus indicus* Balthasar, 1941 : Chennai, Tamil Nadu  
*P. nagporensis* Pittino and Mariani, 1986 : Chota Nagpur; Bihar  
*P. nathani* Pittino and Mariani, 1986 : Coimbatore; Tamil Nadu
- Genus *Pleurophorus* Mulsant, 1842  
*Pleurophorus bengalensis* Pittino and Mariani, 1986 : West Bengal  
*P. besucheti* Pittino and Mariani, 1986 : Kerala  
*P. schereri* Pittino and Mariani, 1986 : Kaziranga; Assam
- Genus *Rhyssamodes* Reitter, 1892  
*Rhyssamodes indicus* Pittino, 1984 : Dhanjuri; West Bengal
- Genus *Rhyssemus* Mulsant, 1842  
*Boucardius* Petrovitz, 1967  
*Rhyssemus bufonis* Boucomont, 1935 : Srinagar; Jammu & Kashmir  
*R. falcatus* Petrovitz, 1961 : Tasso, Gilgit, Satil; Jammu & Kashmir  
*R. freyi* Petrovitz, 1963 : Kaziranga; Assam  
*R. germanus* Linnaeus, 1767 : Haryana, Uttar Pradesh; India; Widely distributed. Andamans (Chandra, 1991)  
*funnebris* Roubal, 1912  
*geminatus* Reitter, 1890  
*obsoletus* Rey, 1890  
*puncticollis* Brown, 1929  
*R. hamatus* Petrovitz, 1963 : Rangpur; Bengal  
*R. inscitus* Walker, 1858  
*crispus* Reiche, 1907  
*insignicellis* Lea, 1923  
*malasiacus* Lansberge, 1886 : India  
*mussardi* Petrovitz, 1975  
*papuanus* Petrovitz, 1965  
*scabripennis* Fauvel, 1907  
*sculpifrons* Fairmaire, 1907

- tarsalis* Waterhouse, 1876 : North India  
*transversus* Reiche, 1907
- R. karnatakaensis* Pittino, 1984 : Chikmagalur; Karnataka
- R. loebli* Petrovitz, 1975 : Udamapelt; Tamil Nadu
- R. procerus* Petrovitz, 1973 : New Delhi
- R. ritsemae* Clouet, 1901 : East India  
*costulatus* Clouet, 1901
- R. sinuaticollis* Pittino, 1984 : Puna; Maharashtra
- Genus *Trichiorhyssemus* Clouet, 1901
- Trichiorhyssemus babaulti* Benard, 1917 : Sarada, Ganjam; Tamil Nadu
- T. expansicollis* Benard, 1930 : Kodaikanal; Tamil Nadu
- T. klapaleki* Balthasar, 1963 : South India
- T. malabricus* Balthasar, 1963 : Malabar Coast; Kerala
- T. setiventris* Petrovitz, 1968b : Kochin; Kerala
- Tribe RHYPARIINI A. Schmidt, 1910b
- Genus *Rhyparus* Westwood, 1843  
*Antrisis* Pascoe, 1866  
*Rhyparus* De jean, 1833  
*Rhyparus* Westwood, 1843
- Rhyparus nilgirensis* Arrow, 1909 : Nilgiri Hills, Tamil Nadu

## SUMMARY

A check-list of 133 species of subfamily Aphodiinae so far reported from India is given citing the distribution and references.

## ACKNOWLEDGEMENT

The author is grateful to the Director, Dr. J. R. B. Alfred, Zoological Survey of India, for providing the necessary facilities and to Dr. S. Biswas, Officer-in-Charge of Coleoptera Section, Z. S. I., Calcutta, for encouragement and going through the manuscript.

## REFERENCES

- Arrow, G. J., 1909—Four new lamellicorn Coleoptera from the Oriental Region, *Ann. Mag. nat. Hist.*, London, **4** : 91-94.
- Balthasar, V., 1933—Neue Coprophagen-Arten aus British-Indien und Indochina. *Cas. Csl. Spol. ent.*, Praha, **30** : 45-51.
- Balthasar, V., 1935—Trois nouvelles especes du genre *Aphodius* Illiger des Indes orientales. *Fol. Zool. hydrobiol.*, Riga, **7** : 254-256.
- Balthasar, V., 1937—Neue coprophage Scarabaeiden von der Ukerewe - Inseln in Ost-Afrika. *Arab. morph. Tax. Ent.*, Berlin D., **4** : 192-203.
- Balthasar, V., 1939—Neue Arten der coprophagen Scarabaeiden aus dem Museo Zoologico della R. Universita di Firenze. **25** : 1-36.
- Balthasar, V., 1940—Neue *Uroxys*-Arten. *Ent. Blatter*, Krefeld, **36** : 33-39.
- Balthasar, V., 1941a—Neue Arten der coprophagen Scarabaeiden aus dem Hamburger Zoologischen Museum. *Zool. Anz.*, Leipzig, **133** : 161-171.
- Balthasar, V., 1941b—Eine Reihe von neuen coprophagen Scarabaeiden. *Mitt. munch. ent. Ges.*; Munchen, **31** : 164 - 184.
- Balthasar, V., 1946—DE novis generis *Aphodius* Illig. speciebus. *Sbor. ent. Odd. nar. Mus.*, Praha, **25** : 49 - 54.
- Balthasar, V., 1955—Scarabaeidae der Aphghanistan-Expendition (1952-53), J. Klapperichs. *Sbor. ent. Odd. nar. Mus.*, Praha, **30** : 409-439.
- Balthasar, V., 1963—Neue Arten der Gattung *Trichiorhyssenus* Cl., *Cas. Csl. Spol. ent.*, Praha, **60** : 135-139.
- Balthasar, V., 1965—Eine neue Gattung and Untergattung und neue Arten der Scarabaeoidea. *Deut. ent. Zeit.*, Berlin, **12** : 311-323.
- Balthasar, V., 1967—Neue Arten der Familie Aphodiidae. *Acta ent. bohemoslovaca*, Praha, **64** : 122-139.
- Balthasar, V., 1973—Neue Arten der Gattung *Aphodius* III. *Ent. Blatter*, Krefeld, **69** : 51-56.
- Bedel, L., 1909—Notes sur divers Scarabaeidae rares ou localises dans les limites du bassin parisien. *Bull. Soc. ent. France*, Paris : 302-304.
- Bedel, L., 1911—Synonymies de Scarabaeidae paleartiques. *Bull. Soc. ent. France*. Paris : 377-381.
- Benard, G., 1917—Description d'une nouvelle espece due genre *Trichiorhyssenus*. *Bull. Soc. ent. France*, Paris, 167-168.

- Benard, G., 1930—Description d'une nouvelle espece du genre *Trichiorhyssemus*. *Bull. Mus. nat. Hist. nat.*, Paris, **2** : 632-633.
- Boheman, C. H., 1857—Insecta Caffrariae annis 1838-1845a J. A. Wahlberg collecta amici auxilio sussultus descripsit. *Coleopera. Holmiae*, **2** : 1-395.
- Bordat, P., 1988—Fauna de Madagascar. Insects Coleopteres : Aphodiinae et Eupariinae (*Mus. nat. Hist. nat.*) Paris.
- Boucomont, A., 1921—In Boucomont A & Gillet, J. Fauna entomologique de l'Indochine francaise. Fam. Scarabaeidae Laparosticti (Coleopteres). *Saigon*, **4** : 1-76.
- Boucomont, A., 1935—In VISSER P. C. & C. : Wissenschaftliche Ergebnisse der Niederlandischen Expedition in der Karadkorum und die angrenzended Gebiete. 1922, 1925 und 1929-30. Insects. *Leipzig* : 205-425.
- Brown, W. J., 1929—Studies in the Scarabaeidae, II, *Canadian Entomologist*, Ottawa, **61** : 86-93.
- Castelnau, F. L. 1840—Histoire naturelle des Insectes Coleopteres. Paris **2** : 1-564.
- Champion, G. C. & Wassmann, E., 1923—New or imperfectly known Corythoderini from British India. *Ann. Mag. nat. Hist.*, London, **11** : 569-581.
- Chandra, K., 1991—Scarabaeid fauna (Coleoptera : Insecta) of Bay Islands, *J. Andaman Sci. Assoc.* **7** (2) : 1-7.
- Chandra, K. 1992—New records of Scarabaeid beetles (Insecta) from A & N Islands, *J. Andaman Sci. Assoc.* **8** (1) : 79-80.
- Chevrolat, A., 1864—Coleopteres de l'île Cuba. Notes, synonymies et descriptions d'especes nouvelles. (V Mem. Suite). *Ann. Soc. ent. France*, Paris, **4** : 405-418.
- Chevrolat, A., 1869—*Aphodius porcus* parasite du *Geotrupalus stercorarius*. In : Nouvelles et faits divers. *Abeille*, Paris, **7** : 79.
- Clouet, L., 1901—Essai monographique sur le genre *Rhyssemus*., *Mem. Soc. ent. Belg.*, Bruxelles, **8** : 1-124.
- Dejean, P. F. M. A., 1833—Catalogue des Coleopteres de la collection de M. Le Comte Dejean (2e ed.; pp. 1-176; 1833; pp. 177-256 : 1834; pp. 257-360 : 1835; pp. 361-433 : 1835). Paris : 1-443.
- Dellacasa, G., 1983—Sistemica e nomenclatura degli Aphodiini italiani. *Mon. Mus. reg. Sci. nat.*, Torino, **1** : 1-464.
- Dellacasa, M., 1987—Contribution to A world-wide catalogue of Aegiallidae, Aphodiidae, Aulonocnemidae, Termitotrogidae (Coleoptera : Scarabaeoidea), *Memorie Della Socieita Entomologica Italiana*, **66** : 1-455.
- Duval, P. N. C. J., 1856—Coleoptera of Cuba. In RAMON de la SAGRA : Historia fisica, politica natural de la Isla de Cuba. Pt. 2. Historia natural. Paris. **7** : 1-136.

- Endrodi, S. 1955—Contribution a l' etude de la fauna entomologique du Ruanda. *Urindi Ann. Mus. r. Congo Belg.*; **36** : 88-104.
- Endrodi, S. 1957—Africanische Aphodiinae aus der sammlung der Musse Royal du Congo Belgre in Tervuren. *Revue Zool. Bot. afr.* **56** : 207-218.
- Endrodi, S., 1960—Diagnosen von einigen neuen Aphodiinen aus dem congo. *Revue Zool. Bot. afr.*, Bruxelles, **62** : 347-354.
- Endrodi, S., 1964—Die Aphodiinae des congo Gebietes in Rahmen der Fauna von Zentral-Afrika *Ann. Mus. r. Afr. centr.*, Tervuren, **123** : 1-415.
- Fabricius, J. C., 1781—Species Insectorum exhibentes eorum differentias specificas, synonyma auctorum, loca natalia, metamorphos in adiectis observationibus, descriptionibus. (T. 1-2) Hamburgi et Kilonii, **1** : 1-552.
- Fabricius, J. C., 1787—Mantissa Insectorum sistens eorum Species nuper detectas adiectis Characteribus genericis, Differentiis specificis, Emendationibus, Observationibus. Hafniae, **1** : 1-380.
- Fabricius, J. C., 1792—Entomologia systematica emendata et aucta. Secundum Classes, Ordines, Genera, Species adiectis Synonymis, Locis, Observationibus, Descriptionibus, Hafniae, **1** : 538.
- Fabricius, J. C., 1801—Systems Eleutheratorum secundum Ordines, Genera, Species, adiectis Synonymis, Locis, Observationibus, Descriptionibus. Kiliae, **1** : 1-506.
- Fairmaire, L., 1893—Coleopteres du Haut Tonkin. *Ann. Soc. ent. Belg.*, Bruxelles, **37** : 303-325.
- Fairmaire, L., 1896—Coleopteres de l' Inde boreale, Chine et Malaisie. *Rhyparus*, Westw., Note XVII. *Notes Leyden Mus.*, Leyden, **18** : 81-129.
- Fairmaire, L., 1897—Description de coleopteres nouveaux de la Malaisie, de l' Inde et de la Chine. (25 note). *Notes. Leyden Mus.*, Leyden, **19** : 209-233.
- Fallen, C. F., 1807—Observationes entomologicae. Lundae, **2** : 21-30.
- Germar, E. F. 1813—Neue Insekten beschrieben *Mag. ent. Germar*. Halle, **1** : 114-133.
- Germar, E. F. 1848—Beitrage zur Insectenfauna von Adelaide. *Linnaea ent.*, Berlin, **3** : 153-247.
- Gestro, R., 1891—Viaggio di Leonardo Fea in Birmaniae regioni vicine 40. Contribuzione allo studio degli insetti termitofili. *Ann. Mus. civ. St. nat.*, Genova, **10** : 903-907.
- Gistel, J., 1857—Achthundert und zwanzig neue oder unbeschriebene wirbellose Thiere, *Vacuna*, Landshut, **2** : 513-606.
- Gyllenhal, L., 1808—Insecta Svecica Classis-I. Coleopera sive Eleuterata. Scaris, **1** : 1-572.
- Harold, E., 1859—Beitrage Zur Kenntniss einiger coprophagen Lamellicornien (Erstes Stuck). *Berl. ent. Zeits*, Berlin, **3** : 193-224.

- Harold, E., 1860—Diagnoses de nouvelles especes d' *Aphodius*. *Ann. Soc. ent. France*, Paris, **8** : 614-616.
- Harold, E., 1861—Beitrage Zur Kenntniss einiger coprophagen Lamellicornien. (Zweites Stuck). *Berl. ent. Zeits.*, Berlin, **5** : 92-115.
- Harold, E., 1862—Beitrage Zur Kenntniss einiger coprophagen Lamellicornien. (Viertes Stuck). *Berl. ent. Zeits.*, Berlin, **6** : 379-403.
- Harold, E., 1867—Diagnosen neuer Coprophagen. *Col. Hefte*, Munchen, **2** : 94-100.
- Harold, E., 1868—Diagnosen neuer coprophagen. *Col. Hefte*, Munchen, **3** : 80-86.
- Harold, E., 1869—Diagnosen neuer Coprophagen. *Col. Hefte*, Munchen, **5** : 94-104.
- Harold, E., 1874—Beitrage zur Kenntniss einiger coprophagen Lamellicornien. (Achstes Stuck). *Berl. ent. Zeits.*, Berlin, **18** : 177-208.
- Harold, E., 1881—Einige neue Coleopteren. *Mitth. munch. ent. Ver.*, Munchen, **5** : 86-92.
- Heer, O., 1841—Fauna Coleopterorum Helvetica (v. 1 : I-III; 1838-1842) Turici, **1** : 361-652.
- Hope, F. W., 1846—Descriptions of new Coleoptera, collected by Mr. Fortnum at adelaide in South Australia. *Proc. ent. Soc. London*, **4** : 146-147.
- Iablokov, S. M. K. 1964—Novyi navoznik iz Armyanskoj SSR. *Dokl. Ak. Nauk. Armyan SSR*. Erevan, **39** : 61-63.
- Illiger, J. K. W., 1798—Verzeichniss der Kafer Pveussens. Entworten von Johan Gottlieb Kugelann Apotheker in Osterode. Mit einer Vorrede des Professors und Pagenhofmeisters ... Halle : 1-510.
- Johnson, C., 1978—A new species of *Aphodius* (*Loboparius*) from India, *Entomologist month. Mag.*, London, **114** : 53-54.
- Klug, J. C. F., 1845—In Eherenberg, C. G. : *Symbolae physicae seu Icones et Descriptiones Corporum naturalium ... Pars Zoologica*. V 1-5 (1828-1845). Berolini.
- Klug, J. C. F., 1855—Diagnosen der neuen Coleopteren aus Mossambique. *Ber. Akad. Wiss.*, Berlin, **20** : 643-660.
- Koshantschikov, W. 1912—Vierter Beitrag zur Kenntnis der Aphodiini. *Russk. ent. Oboz.*, S. Peterberg, **12** : 511-523.
- Koshantschikov, W., 1916—Septieme contribution a l'etude des Aphodiini. *Russk. ent. Oboz.*, S. Peterburg, **16** : 192-208.
- Landin, B. O., 1974—Taxonomic Studies on African Aphodiini II. The Genus *Coloboterus* Mulsant with Description of Two New Species. *Entmologica scand.*, Lund, **5** : 233-239.
- Lansberge, J. W., 1886—Description de quelques Scarabaeides des Indes Neerlandaises appartenant au Musee de Leyde (Note XVIII), *Notes Leyden Mus.*, Leyden, **8** : 131-137.

- Lea, A. M. 1923—On Australian. *Proc. r. Soc. Vict.*, Melbourne, **36** : 1-20.
- Leach, W. E., 1815—Entomology. In Brewster : Edinburgh Encyclopaedia, Edinburg, **9** : 57-172.
- Linnaeus, C., 1767—Systema Naturae per Regna tria Naturae, Secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis, Synonymis, Locis, Ed. XIII, ref : 1766-67). Holmiae, **1** : 1-1327.
- Mader, L., 1938—Neue Coleopteren aus China und Japan nebst Notizen. *Ent. Nachrichtenbl.*, Troppan, **12** : 40-61.
- Marsham, T. 1802—Entomologia Brittanica, sistens insecta Britannia indigena, secundum Methodum Linnaenam deposita. Londini, **1** : 1-548.
- Mittal, I. C. 1993—New aphodiine species (Coleoptera : Scarabaeidae) from India. *J. ent. Res.*, **17** (4) : 239-245.
- Montrouzier, X., 1860—Essai sur la faune entomologique de la Nouvelle caledonie (Balade) et des iles Pins, Art, Lifu, etc. *Ann. Soc. ent. France*, Paris, **8** : 229-308.
- Motschulsky, V., 1859—Sur les Collections Coleoptero-logiques de Linne et de Fabricius (continuation). XXII. Lamellicornes, *Etud. entom.*, Helsingfors, **8** : 147-162.
- Motschulsky, V., 1860—Diagnoses d' Insectes nouveaux des rives du fleuve Amur et de la Daourie meridionale. *Etud. entom.*, Helsingfors, **9** : 39-41.
- Motschulsky, V., 1863—Essai d' un Catalogue des Insectes de l'ile Ceylon. II. *Suite. Bull. Soc. imp. Nat.* Moscou, **36** : 421-532.
- Mulsant, E., 1842—Histoire naturelle des Coleopteres de France. Lamellicornes. Paris, Lyon : 1-623.
- Mulsant, E., & Rey, C., 1869—In Mulsant, E. : Histoire Naturelle des Coleopteres de France. Tribu des Lamellicornes. *Ann. Soc. agric.*, Lyon, **2** : 241-650.
- Nakane, T., 1961—Notes on some Aphodiinae from Micronesia. *Scient. Rep. Saikyo Univ. Kyoto*, **3** : 151-152.
- Nakane, T., 1967—Descriptions of Few New Forms of the Genus *Aphodius* Illiger from Japan. *Ent. Rev. Japan*, Osaka, **19** : 1-4.
- Olivier, A. G., 1789—Entomologie, ou Historie naturelle des Insectes, avec leurs caracteres generiques et specifiques, leur description, leur synonymie ... Coleopteres. Paris, **1** : 1-497.
- Pascoe, E. P., 1866—Notices of new on little-known Genera and species of coleoptera, Pt. V *Journ. Ent.*, London, **2** : 443-493.
- Paulian, R., 1934—Les *Aphodius* de Hoa-Binh (Tonkin). *Bull. Soc. ent. France*, Paris, **39** : 110-112.

- Paulian, R., 1936a—Contribution a l'étude de quelques Aphodiini asiatique (Col. Lam.) *Folia Zool. hydrobiol.*, Riga, **9** : 62-66.
- Paulian, R., 1936b—The Indian Aphodiinae of the subgenus *Trichonotulus*. *Rec. Indian Mus.*, Calcutta, **38** : 363-365.
- Paulian, R., 1942—Coleoptera Scarabaeidae : Aphodiinae. Exploration du Parc National Albert. Mission G. F. de Witte. (1933-35). (*I. Parcs n. congo B.*), Bruxelles, **35** : 1-143.
- Paulian, R., 1979—Un nouvel Aphodiidae du Portugal. *Bull. Soc. ent. France*, Paris, **84** : 66-67.
- Paulian, R. and Villiers, A., 1939—Recotles de R. Paulian et A. Villiers dans le Haut Atlas Marocain, 1938. Larves des Coleopteres. *Revue franc. Ent.*, Paris, **6** : 44-58.
- Peringuey, L., 1901—Descriptive Catalogue of the Coleoptera of South Africa (Lucanidae and Scarabaeidae) *Trans. S. Afri. ph. Soc.*, Cape Town, **12** : 1-563.
- Petrovitz, R., 1958—Neue asiatische *Aphodius* arten. *Ent. Arb. Mus. Frey*, Tutzing b. M., **9** : 131-139.
- Petrovitz, R., 1961a—Zoologische Ergebnisse der Osterreichischen Karakorum-Expendition. 1958. II Teil. Coleoptera : Scarabaeidae. *Sitzber. ost. Akad. Wiss.*, Wien, **170** : 101-118.
- Petrovitz, R., 1961b—Neue and bemerkenswerte Aphodiinae aus dem Museo entomologico del Pontificio Istituto Missioni estere, Monza. *Boll. Soc. ent. ital.*, Genova, **91** : 144-149.
- Petrovitz, R., 1962a—Neue und verkannte Aphodiinae aus allen Erdteilen. 3. *Ent. Arb. Mus. Frey*, Tutzing b. M., **13** : 101-131.
- Petrovitz, R., 1962b—Neue und interessante Scarabaeidae aus dem vorderen Orient. I Teil. *Reichenbachia*, Dresden, **1** : 107-124.
- Petrovitz, R., 1963a—Neue und Verkannte Aphodiidae aus allen Erdteilen. 4. *Ent. Arb. Mus. Frey*, Tutzing b. m., **14** : 630-647.
- Petrovitz, R., 1963b—Neue Arten der Gattung *Rhyssemus* Mulsant. *Reichenbachia*, Dresden, **2** : 33-45.
- Petrovitz, R., 1964—Neue africanische und australische Aphodiidae. *Reichenbachia*, Dresden, **4** : 171-207.
- Petrovitz, R., 1965—Neue Aphodinae. *Mitt. Zool. Mus.*, Berlin, **41** : 161-176.
- Petrovitz, R., 1967—Neue und verkannte Aphodiinae aus allen Erdteilen. 5. *Ent. Arb. Mus. Frey*, Tutzing b. M., **18** : 388-403.

- Petrovitz, R., 1968a—Scarabaeidae aus Indien und Nepal. I Teil. *Zeits. Arb. osterr. Ent.* Wien, **20** : 35-38.
- Petrovitz, R., 1968b—Fünf neue *Trichiorhyssemus*-Arten aus der Orientalischen Region. *Ent Nachr. Bl.*, Wien, **15** : 6-12.
- Petrovitz, R., 1970—Scarabaeidae aus Indien und Nepal. *Zeits. Arb. Osterr. Ent.*, Wien **22** : 17-21.
- Petrovitz, R., 1973—Neue Aphodiinae aus der Orientalischen Region. *Ent. Arb. Mus. Frey Tutzing b. M.*, **24** : 304-310.
- Petrovitz, R., 1975—Neue Aphodiinae, Hybosorinae, Bolbocerinae und Orphninae. *Revue suisse Zool.*, Geneve, **82** : 615-624.
- Petrovitz, R., 1976—Neue *Aphodius* — Arten aus der Orientalischen region. *Ent. Blatter*, Krefel, **72** : 1-9.
- Pittino, R., 1983—Psammodiini nuovi o interessanti di Europa, Asia e Africa, XXII contributo alla conoscenza dei Coleoptera, Scarabaeoidea. *Giorn. ital. Ent.*, Milano, **1** : 91-122.
- Pittino, R., 1984—Taxonomic considerations on, types revisions, lectotypes designations and descriptions of new or little known Psammodiini from Palaearctic, Oriental and ... *Giorn. ital. Ent.*, Milano, **2** : 13-98.
- Pittino, R., 1998—Four new *Aphodius* Ill. species from Asia and Africa. *Boll. Soc. ent. ital.*, Genova **120** : 122-120.
- Pittino, R. & Mariani, G., 1986—A revision of the Old World species of the genus *Diastictus* Muls, and its allies (*Platytomus*, *Pleurophorus*, *Afrodiastictus*, *Bordatius*). *Giorn. ital. Ent.*, Milano, **3** : 1-165.
- Reiche, L., 1863—(In Grenier A. : Catalogue des Coleopteres de France et materiaux pour servir la fauna de Coleopteres francais). *Materiaux pour la fauna francaise*. Paris : 1-135.
- Reitter, E. 1890—Neue Coleopteren aus Europe, den angrenzenden Landern und sibirien, mit Bemerkun gen uber bekannte Arten. Elfter Theil. *Deut. ent. Zeits.*, Berlin, **1** : 385-396.
- Reitter, E., 1892—Bestimmungs—Tabelle der lucaniden un coprophagen Lamillicornen des palaearktischen Faunengebietes *Verb. Naturf. Ver.*, Brunn, **30** : 140-262.
- Reitter, E., 1895—Einige neue Coleopteren aus Korea und China. *Wien. ent. Zeit.*, Wien, **14** : 208-210.
- Reitter, E., 1901—Weitere Beitrage Zur Coleopteren-Fauna des russischen Reiches. *Deut. ent. Zeits.*, Berlin : 65-84.
- Rey, C., 1890—Remarques en passant. *Echange*, Lyon, **6** : 171-172.

- Roth, J. R., 1851—Diagnosen neuer Coleoptera aus Abyssinien. *Arch. Naturg.*, Berlin, **17** : 121-133.
- Roubal, J., 1912—Beschreibungen funt never palerktischer Coleopteren-Formen. *Col. Rundsch.*, Wien, **1** : 154-155.
- Schmidt, A., 1907—Zwei neue Varietaten von Aphod. Schenklingi Schmidt. *Deut. ent. Zeits.*, Berlin : 570.
- Schmidt, A., 1908—Ein Beitrag zur indischen Aphodiinen-Fauna. *Ent. Wochenbi.*, Leipzig, **25** : 46-48.
- Schmidt, A., 1909a—Neue Aphodiinen und einige synonymische Bemerkungen. *Notes Leyden Mus.*, Leyden, **31** : 101-124.
- Schmidt, A., 1909b—Eine Serie neuer Aphodiinen und eine neue Gattung. (Fortsetzung II). *Societas ent. Zurich*, **23** : 10-12.
- Schmidt, A., 1910a—Neue arten aus den Gattungen *Aphodius* Illig., *Ataenius* Har., *Saprosites* Redtenb. *Deut. ent. Zeits.*, Berlin : 353-361.
- Schmidt, A., 1910b—Coleoptera Lamellicornia Aphodiinae. In : Wytsman P. : Genera Insectorum. Tervuren, **110** : 1-155.
- Schmidt, A., 1910c—Aphodiinae. Coleopterorum Catalogue auspiciis auxilio W. Junk editus a S. Schenkling Berlin, **20** : 1-111.
- Schmidt, A., 1911a—Eine Serie neuer Aphodiinen. *Stett. ent. Zeit.*, Stettin, **72** : 1-51.
- Schmidt, A., 1911b—Funf neue Aphodiinen aus dem Museum zu London. *Societas ent.*, Zurich, **26** : 14-16.
- Schmidt, A., 1913—Erster Versuch einer Einteilung der exotischen Aphodien in Subgenera und als Anhang einige Neubeschreibungen. *Arch. Naturg. Abt. A.* Berlin, **79** : 117-178.
- Schmidt, A., 1916—Namenanderungen und Beeschreibung neuer Aphodiinen. *Arch Naturg. Abt. A.* Berlin, **82** : 95-116.
- Schmidt, A., 1922—Coleoptera Aphodiinae—(*Das Tierreich*) Berlin, **45** : 1-614.
- Seabra, A. F., 1909—Esboco monografico sobre os scarabaeidos de Portugal (Aphodiini e Hybosorini). VI. Estodos sobra os animaes uteis nocivos a agricultura. (*D. gen. Agr. Lab. Pat.* V), Lisboa : 1-126.
- Stebnicka, Z., 1981—Aphodiinae from the Himalayas, Assam and Sri Lanka. *Ent. Basiliensia*, Basel, **6** : 319-327.
- Stebnicka, Z., 1983—New Species of *Caelius* Lew from Himalayas. *Revue suisse Zool.*, Geneve, **90** : 317-323.
- Tangelder, I. & Krikken, J., 1982—*Termitophilus* of the Tribe Corythoderini : a taxonomic review. *Zool. Verhandel.*, Leyden, **194** : 1-114.

- Walker, F., 1858—Characters of some apparently undescribed Ceylon Insects. III. *Ann. Mag. nat. Hist.*, London, **2** : 202-209.
- Wassmann, E., 1899—Neue Termitophilen und Myrmecophilen aus Indien. *Deut. ent. Zeits.*, Berlin, **1** : 145-169.
- Wassmann, E., 1902—Termiten Termitophilen und Myrmecophilen gesammelt auf Ceylon von Dr. W. Horn 1899, mit anderen Ostindischen Material. *Zool. Jahrbuchen*, Jena, **17** : 99-164.
- Wassmann, E., 1911—In K. Escherich : Termitenleben auf Ceylon. *Biolog. Zentralbl.*, Leipzig, **31** : 394-412.
- Wassmann, E., 1918—Myrmecophile und termitophile Coleopteren aus Ost-indien, hauptsächlich gesammelt von P. J. Assmuth S. J. II. Scarabaeidae. *Wien. ent. Zeit.*, Wien, **37** : 1-23.
- Waterhouse, C. O., 1876—New Species of Coleoptera from Island of Rodriguez, collected by the Naturalists accompanying the Transit-of-Venus Expedition. *Ann. Mag. nat. Hist.*, London, **18** : 105-121.
- Westwood, J. O., 1839—Description of insects figured in plates 9 and 10. In Royle J. F. : *Illustration of the Botany and other Branches of the Natural History of the Himalayan...* London, **7** : 53-55.
- Westwood, J. O., 1843—On some new species of Aphodiidae, from India *Trans. ent. Soc.*, London, **3** : 93.
- Westwood, J. O., 1845—Description of a new genus of Lamellicorn Beetles apparently belonging to the family Aphodiidae, from India. *Proc. ent. Soc.*, London, **8** : 124.
- Westwood, J. O., 1847—Descriptions of some Exotic Insects belonging to the Family Aphodiidae. *Trans. ent. Soc.*, London, **4** : 239-243.
- Wiedemann, C. R. W., 1823—Zweihundert neue Kafer von java, Bengalen und dem Vorgebirge der guten Hoffnung. *Zool. Mag.*, Kiel, **2** : 1-135.
- Wiedemann, C. R. W. and Germar, E. F. 1821—Neue exotische Kafer. *Mag. Ent. Germar*, Halle, **4** : 107-183.