



# *Fauna of India Checklist*

## A CHECKLIST OF SPHECIDAE (INSECTA: HYMENOPTERA: APOIDEA) OF INDIA

S. Anagha and P. Girish Kumar

(Updated: June 2020)



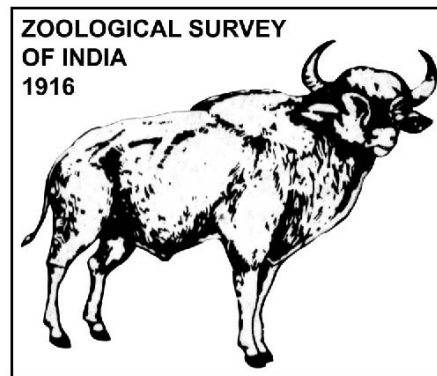
*Chlorion lobatum*

Zoological Survey of India

Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata- 700 053

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**Cover Photo:** Male of *Chlorion lobatum* (Fabricius, 1775)



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# A Checklist of Sphecidae (Insecta: Hymenoptera: Apoidea) of India

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## INTRODUCTION

Sphecidae is a cosmopolitan family of solitary wasp, commonly known as mud dauber wasps and digger wasps. Until recent past, the name Sphecidae were given to much larger group of wasps but now the name is restricted to separate family based on what used to be the subfamily Sphecinae. A total of 783 species under 19 genera in 5 subfamilies (Ammophilinae, Chloriontinae, Sceliphrinae, Sphecinae, and Stangeellinae) are currently included in the family (Pulawski, 2020). Sphecid wasps vary greatly in size and colour. They either dig simple burrows in soil or construct nest of mud, in and around homes, sheds or under open structures. Since they have long and petiolate metasoma that gives the body a "thread-waisted" appearance, they are also known by the name thread waisted wasps.

Sphecid wasps are powerful predators of many insects including insect pests of various crops. Hence they have been considered as valuable biocontrol agents. Their prey consists of spiders, cockroaches, crickets, grasshoppers, katydids, mantids, lepidopterous and hymenopterous caterpillars. The vast majority of sphecids practices mass provisioning, providing prey items before egg laying (Bohart & Menke, 1976).

The information on the sphecid fauna of India is limited. Only few workers have made intensive collections and taxonomic studies on this group from India. Fabricius (1775), Smith (1856), Cameron (1890), Bingham (1897), Nurse (1903), Gupta (1995), Jha & Farooqi (1995, 1996), Sudheendrakumar & Narendran (1989), Jonathan et al. (2000), Jonathan & Kundu (2003), Kundu et al. (2006), Girish Kumar et al. (2014), Mazumdar et al. (2018) contributed to the knowledge of Indian sphecids. A frequently updating online world catalog on Sphecidae is being published by Pulawski (2020).

### Systematic Accounts

**Class: Insecta**

**Order: Hymenoptera**

**Suborder: Apocrita (Aculeata)**

**Superfamily: Apoidea**

**Family: Sphecidae**

### Subfamily Ammophilinae

#### Genus 1. *Ammophila* Kirby, 1798

1. *Ammophila brevipennis* Bingham, 1897 — India: Himachal Pradesh, Maharashtra (Gupta, 1960; Pulawski, 2020).
2. *Ammophila clavus* (Fabricius, 1775) — India: Arunachal Pradesh, Assam, Bihar, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Sikkim, Tamil Nadu, Tripura,

Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Australia; Bangladesh; China (including Hong Kong); Indonesia; Japan; Korea; Laos; Malaysia; Myanmar; Nepal; Pakistan; Philippines; Singapore; Sri Lanka; Taiwan; Thailand; Vietnam (Barthélémy, 2014; Dollfuss, 2013; Jonathan & Kundu, 2003; Kundu et al., 2006; Pulawski, 2020).

3. *Ammophila formosensis* Tsuneki, 1971 — India: Jammu and Kashmir. *Elsewhere*: China; Taiwan (Dollfuss, 2013; Pulawski, 2020).
4. *Ammophila gracillima* Taschenberg, 1896 — India: Gujarat. *Elsewhere*: Afghanistan; Algeria; Canada; China; Egypt; Ethiopia; Iran; Iraq; Israel; Jordan; Kazakhstan; Libya; Mauritania; Mexico; Mongolia; Morocco; Niger; Oman; Russia; Saudi Arabia; Sudan; Syria; Tajikistan; Tunisia; Turkey; Turkmenistan; United Arab Emirates; Uzbekistan, Western Sahara (Pulawski, 2020).
5. *Ammophila heydeni* Dahlbom, 1845 — India. *Elsewhere*: Afghanistan; Albania; Algeria; Armenia; Austria; Bulgaria; China; Croatia; Cyprus; Czech Republic; France; Germany; Greece; Hungary; Indonesia; Iran; Iraq; Israel; Italy; Jordan; Kazakhstan; Kosovo; Kyrgyzstan; Libya; Macedonia; Malta; Moldavia; Mongolia; Morocco; Pakistan; Poland; Portugal; Romania; Russia; Serbia; Slovakia; Slovenia; Spain; Syria; Switzerland; Tajikistan; Tunisia; Turkey; Turkmenistan; Ukraine; Uzbekistan; Yemen (Pulawski, 2020).
6. *Ammophila laevigata* Smith, 1856 — India: Arunachal Pradesh, Bihar, Gujarat, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: China; Laos; Madagascar; Nepal; Sri Lanka; Thailand; Vietnam (Dollfuss, 2013; Jonathan & Kundu, 2003; Kundu et al., 2006; Pulawski, 2020).
7. *Ammophila punctata* Smith, 1856 — India: Himachal Pradesh, Punjab, Sikkim, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: China; Iran; Nepal; Pakistan (Gupta, 1960; Jonathan & Kundu, 2003; Pulawski, 2020).
8. *Ammophila sarekandana* Balthasar, 1957 — India: Jammu and Kashmir. *Elsewhere*: Afghanistan; Kyrgyzstan; Tajikistan; Uzbekistan (Pulawski, 2020).
9. *Ammophila smithii* Smith, 1856 — India. *Elsewhere*: Pakistan (Pulawski, 2020).
10. *Ammophila tyrannica* Cameron, 1890 —? India (Cameron, 1890; Pulawski, 2020).
11. *Ammophila vagabunda* Smith, 1856 — India. *Elsewhere*: China; Indonesia; Japan; Korea; Mongolia; Russia; Taiwan; Tajikistan; Turkey (Pulawski, 2020).

### **Genus 2. *Eremochares* Gribodo, 1883**

12. *Eremochares dives* (Brullé, 1833) — India: Maharashtra, Punjab. *Elsewhere*: Afghanistan; Algeria; Azerbaijan; Bahrain; China; Djibouti; Egypt; Greece; Iran; Iraq; Israel; Kazakhstan; Lebanon; Libya; Morocco; Oman; Russia; Saudi Arabia; Syria; Tajikistan; Tunisia; Turkey; Turkmenistan; Ukraine; Uzbekistan; Western Sahara (Pulawski, 2020).

### **Genus 3. *Parapsammophila* Taschenberg, 1869**

13. *Parapsammophila erythrocephalus* (Fabricius, 1781) — India: Kerala, Maharashtra, Punjab, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Iran; Madagascar (Cameron, 1889; Pulawski, 2020).
14. *Parapsammophila funerea* (Nurse, 1903) — India: Gujarat (Nurse, 1903; Pulawski, 2020).

**Genus 4. *Podalonia* Fernald, 1927**

15. *Podalonia caucasica* (Mocsary, 1883) — India: Jammu and Kashmir, Sikkim. *Elsewhere*: Bulgaria; China; Georgia; Kazakhstan; Kyrgyzstan; Mongolia; Russia; Tajikistan; Uzbekistan (Pulawski, 2020).
16. *Podalonia hirticeps* (Cameron, 1889) — India: Himachal Pradesh, Uttarakhand. *Elsewhere*: Pakistan (Pulawski, 2020).
17. *Podalonia tydei* (Le Guillou, 1841) — India: Himachal Pradesh, ?Jammu and Kashmir, ?Uttarakhand. *Elsewhere*: Afghanistan; Algeria; Angola; Australia; Bulgaria; Cabo Verde Islands; China; Cyprus; Egypt; Eritrea; Ethiopia; France; Greece; Hungary; Iran; Iraq; Israel; Italy; Jordan; Kazakhstan; Kenya; Kuwait; Kyrgyzstan; Libya; Macedonia; Madagascar; Malta; Mongolia; Morocco; Mozambique; New Zealand; Niger; Oman; Pakistan; Poland; Portugal; Qatar; Romania; Russia; Rwanda; Saudi Arabia; Slovakia; Somalia; South Africa; Spain; Sudan; Syria; Tajikistan; Tanzania; Tunisia; Turkey; Turkmenistan; Uganda; Ukraine; United Arab Emirates; Uzbekistan; Western Sahara; Yemen; Zimbabwe (Pulawski, 2020).

**Subfamily Chloriontinae**

**Genus 5. *Chlorion* Latrielle, 1802**

18. *Chlorion lobatum* (Fabricius, 1775) — India: Arunachal Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Bangladesh; China; Indonesia; Laos; Madagascar; Malaysia; Myanmar; Nepal; Philippines; Singapore; Sri Lanka; Thailand; Turkmenistan; Vietnam; West Indies (Girish Kumar et al., 2014; Pulawski, 2020).
19. *Chlorion regale* Smith, 1873 — India: Rajasthan. *Elsewhere*: Afghanistan; Iran; Kazakhstan; Kuwait; Pakistan; Saudi Arabia; Somalia; Turkmenistan; Uzbekistan (Pulawski, 2020).
20. *Chlorion splendidum* Fabricius, 1804 — India: Chhattisgarh, Karnataka, Maharashtra, Pondicherry. *Elsewhere*: Egypt; Eritrea or Ethiopia; Hungary; Iran; Madagascar; Myanmar; Philippines; Saudi Arabia; Somalia; Sudan; Turkmenistan (Girish Kumar et al., 2014; Pulawski, 2020).

**Subfamily Sceliphrinae**

**Tribe Sceliphriini**

**Genus 6. *Chalybion* Dahlbom, 1843**

21. *Chalybion bengalense* (Dahlbom, 1845) — India: Andaman and Nicobar Island, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Algeria; Australia; Bangladesh; Chagos Archipelago; China (including Hong Kong); Egypt; Eritrea; Ethiopia; France; French Polynesia; Gilbert Island; Greece; Guam Island; Hawaiian island; Indonesia; Iraq; Italy; Japan; Kenya; Laos; Madagascar; Malaysia; Maldives; Mascarenes; Mauritius; Micronesia; Mozambique; Myanmar; Nepal; New Caledonia; Philippines; Phoenix island; Seychelles islands; Singapore; South Africa; Sri Lanka; Taiwan; Tanzania; Thailand; Vietnam; Yemen (Barthélémy, 2014; Gadallah, 2020; Jonathan & Kundu, 2003; Pulawski, 2020; Mazumdar et al., 2018).
22. *Chalybion malignum* (Kohl, 1906) — India: Sikkim. *Elsewhere*: China; Indonesia; Malaysia; Myanmar; Sri Lanka; Vietnam (Pulawski, 2020).

23. *Chalybion spinolae* (Lepeletier, 1845) — India: Maharashtra, Meghalaya, West Bengal. *Elsewhere*: Angola; Botswana; Democratic Republic of Congo; Ethiopia; Guinea Bissau; Kenya; Mozambique; Namibia; Sri Lanka; South Africa; Sudan; Tanzania; Uganda; Zambia; Zimbabwe (Pulawski, 2020).

**Genus 7. *Sceliphron* Klug, 1801**

24. *Sceliphron caementarium* (Drury, 1773) — India. *Elsewhere*: Australia; Austria; Bangladesh; Belgium; Belize; Bermuda; Bulgaria; Canada; Canary island; Chile; Cook Island; Costa Rica; Croatia; Cuba; Czech Republic; Eritrea; France; French Polynesia; Fiji; Germany; Hungary; Iran; Italy; Jamaica; Japan; Korea; Luxembourg; Mariana Island; Marshall Island; Mexico; Netherland; New Caledonia; Nicaragua; Portugal; Puerto Rico; Samoa; Slovakia; Switzerland; Ukraine; United States of America; West Indies (Pulawski, 2020).
25. *Sceliphron coromandelicum* (Lepeletier, 1845) — India: Assam, Bihar, Karnataka, Kerala, Maharashtra, Meghalaya, Odisha, Pondicherry, Tamil Nadu, West Bengal. *Elsewhere*: Bangladesh; Cambodia; Laos; Malaysia; Myanmar; Sri Lanka, Thailand; Ukraine (Dollfuss, 2016; Hensen, 1987; Pulawski, 2020).
26. *Sceliphron curvatum* (Smith, 1870) — India: Himachal Pradesh, Jammu and Kashmir, Nagaland, Punjab, Uttarakhand, Uttar Pradesh. *Elsewhere*: Afghanistan; Argentina; Austria; Belarus; Belgium; Bulgaria; Chile; Croatia; Czech Republic; Eurasia; France; French Polynesia; Georgia; Germany; Greece; Hungary; Iraq; Italy; Kazakhstan; Kyrgyzstan; Lithuania; Montenegro; Nepal; Netherland; Pakistan; Poland; Portugal; Russia; Serbia; Slovakia; Slovenia; Spain; Switzerland; Tajikistan; Turkey; Ukraine; Uzbekistan (Pulawski, 2020).
- 27a. *Sceliphron deforme deforme* (Smith, 1856) — India: Assam. *Elsewhere*: China (including Hong Kong); Eurasia; France; Japan; Kazakhstan; Korea; Laos; Mongolia; Montenegro; Myanmar; Philippines; Russia; Tajikistan; Taiwan; Thailand; Vietnam (Barthélémy, 2014; Dollfuss, 2016; Pulawski, 2020).
- 27b. *Sceliphron deforme tibiale* Cameron, 1899 — India: Meghalaya, Sikkim, Uttarakhand, West Bengal. *Elsewhere*: Australia; Bangladesh; Myanmar; Tanzania (Bingham, 1897; Pulawski, 2020).
28. *Sceliphron formosum* (Smith, 1856) — India: Arunachal Pradesh, Himachal Pradesh, Meghalaya, Sikkim, Uttar Pradesh. *Elsewhere*: Australia; China; Indonesia; Japan; Myanmar; New Guinea (Kundu et al., 2006; Pulawski, 2020).
29. *Sceliphron intrudens* (Smith, 1858) — India: Sikkim, Meghalaya. *Elsewhere*: Indonesia; Malaysia; Maldives; Myanmar; Sri Lanka; Thailand; Vietnam (Jonathan & Kundu, 2003; Pulawski, 2020).
30. *Sceliphron isaaci* Jha & Farooqi, 1995 — India: Andaman Islands (Jha & Farooqi, 1995; Pulawski, 2020).
- 31a. *Sceliphron javanum chinense* van Breugel, 1968 — India: ?Sikkim, ?Meghalaya. *Elsewhere*: China; Laos; Vietnam (Pulawski, 2020; van der Vecht & van Breugel, 1968).
- 31b. *Sceliphron javanum javanum* (Lepeletier de Saint Fargeau, 1845) — India: Arunachal Pradesh, Kerala, Sikkim, West Bengal. *Elsewhere*: Cambodia; China; Indonesia; Japan; Laos; Malaysia; Myanmar; Nepal; Sri Lanka; Thailand; Vietnam (Barthélémy, 2014; Dollfuss, 2016; Kundu et al., 2006).

- 31c. *Sceliphron javanum nalandicum* Strand, 1915 — India: Kerala, Maharashtra, Sikkim, Tamil Nadu, West Bengal. *Elsewhere*: Bangladesh; Indonesia; Sri Lanka (Bohart and Menke, 1976; Pulawski, 2020; van der Vecht & van Breugel, 1968).
- 31d. *Sceliphron javanum petiolare* Kohl, 1918 — India. *Elsewhere*: Indonesia; Malaysia; Myanmar; Thailand; Vietnam (Pulawski, 2020; van der Vecht & van Breugel, 1968).
- 32a. *Sceliphron madraspatanum andamanicum* Kohl, 1918 — India: Andaman and Nicobar Islands (Pulawski, 2020).
- 32b. *Sceliphron madraspatanum madraspatanum* (Fabricius, 1781) — India: Assam, Andaman and Nicobar Island, Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Gujarat; Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Pondicherry, Punjab, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Afghanistan; Arabia; Bangladesh; Bulgaria; Cambodia; China; Croatia; Democratic Republic of Congo; France; Greece; Indonesia; Iran; Iraq; Italy; Japan; Kazakhstan; Kyrgyzstan; Laos; Madagascar; Malaysia; Maldives; Montenegro; Myanmar; Nepal; Oman; Pakistan; Philippines; Russia; Spain; Sri Lanka; Syria; Taiwan; Tajikistan; Thailand; Turkey; Turkmenistan; United Arab Emirates; Ukraine; Uzbekistan; Vietnam (Jonathan & Kundu, 2003; Kundu et al., 2006; Pulawski, 2020; van der Vecht & van Breugel, 1968).
- 32c. *Sceliphron madraspatanum pictum* (Smith, 1856) — India: Maharashtra, Punjab, West Bengal. *Elsewhere*: Afghanistan; Iran; Oman; Pakistan; Qatar; Russia; United Arab Emirates (Gadallah, 2020; Pulawski, 2020; van der Vecht & van Breugel, 1968).
33. *Sceliphron neobilineatum* Jha and Farooqi, 1995 — India: Bihar (Jha & Farooqi, 1995; Pulawski, 2020).
34. *Sceliphron paraintrudens* Jha and Farooqi, 1995 — India: Bihar (Jha & Farooqi, 1995; Pulawski, 2020).
- 35a. *Sceliphron rectum rectum* Kohl, 1918 — India: Sikkim. *Elsewhere*: Croatia; Iran; Iraq; Italy; Oman; United Arab Emirates (Gadallah, 2020; Pulawski, 2020).
- 35b. *Sceliphron rectum pulchellum* Gussakovskij, 1933 — Bihar, Gujarat. *Elsewhere*: Iran; Iraq; Oman; Pakistan; Russia; United Arab Emirates (Gadallah, 2020; Hensen, 1987; Pulawski, 2020).

### Subfamily Sphecinae

#### Tribe Prionychini

#### Genus 8. *Prionyx* Van der Linden, 1827

36. *Prionyx binghami* Jha and Farooqi, 1996 — India: Bihar (Jha & Farooqi, 1996, Pulawski, 2020)
37. *Prionyx crudelis* (Smith, 1856) — India: Rajasthan, Tamil Nadu. *Elsewhere*: Afghanistan; Bahrain; Brazil; Bulgaria; Burkina Faso; Comoros; Cyprus; Democratic Republic of the Congo; Egypt; Eritrea; Ethiopia; Greece; Guinea; Indonesia; Iran; Iraq; Israel; Kazakhstan; Kenya; Kuwait; Libya; Madagascar; Mauritania; Mauritius; Mexico; Oman; Philippines; Qatar; Saudi Arabia; Seychelles Islands; Somalia; South America; Sri Lanka; Sudan; Syria; Tajikistan; Tanzania; Turkey; Turkmenistan; United Arab Emirates; Vietnam; Yemen (André, 1888; Gadallah, 2020; Pulawski, 2020).
38. *Prionyx fragilis* (Nurse, 1903) — India: Gujarat. *Elsewhere*: Pakistan (Pulawski, 2020).
39. *Prionyx indus* (Linnaeus, 1758) — India. *Elsewhere*: Angola; Ethiopia; Jamaica; Namibia; South Africa; Tanzania; Zimbabwe (Pulawski, 2020).

40. *Prionyx subfuscatus* (Dahlbom, 1845) — India: ?Jharkhand, Tamil Nadu. *Elsewhere*: Albania; Algeria; Angola; China; Croatia; Cyprus; Czech Republic; Egypt; Ethiopia; France; Germany; Greece; Hungary; Iran; Iraq; Israel; Italy; Kazakhstan; Korea; Kyrgyzstan; Libya; Malta; Mongolia; Morocco; Namibia; Oman; Palestine; Poland; Portugal; Romania; Russia; Saudi Arabia; Slovakia; Somalia; South Africa; Spain; Tajikistan; Turkey; Turkmenistan; Ukraine; United Arab Emirates; Uzbekistan (Gadallah, 2020; Pulawski, 2020).
41. *Prionyx viduatus* (Christ, 1791) — India: Rajasthan. *Elsewhere*: Afghanistan; Algeria; Angola; Botswana; Cameroon; Canary Islands; China; Cyprus; Democratic Republic of the Congo; Egypt; Ethiopia; France; Greece; Guinea; Iran; Iraq; Israel; Italy; Japan; Jordan; Kazakhstan; Kenya; Libya; Malawi; Malaysia; Malta; Mauritania; Morocco; Mozambique; Namibia; Niger; Oman; Portugal; Qatar; Russia; Saudi Arabia; Senegal; Sierra-Leone; Somalia; South Africa; Spain; Sri Lanka; Syria; Taiwan; Tajikistan; Tanzania; Thailand; Tunisia; Turkey; Turkmenistan; Ukraine; United Arab Emirates; Uzbekistan; Vietnam; Western Sahara; Yemen (André, 1888; Gadallah, 2020; Pulawski, 2020).

**Tribe Sphecini**

**Genus 9. *Sphex* Linnaeus, 1758**

- 42a. *Sphex argentatus argenatus* Fabricius, 1787 — India: Arunachal Pradesh, Assam, Bihar, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Odisha, Punjab, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Angola; Australia; Benin; Botswana; Cambodia; China (including Hong Kong); Democratic Republic of the Congo; Dableeh Island; Djibouti; Egypt; Ethiopia; Gambia; Greece; Indonesia; Israel; Ivory Coast; Japan; Kazakhstan; Kenya; Korea; Kuwait; Laos; Malawi; Malaysia; Myanmar; Mozambique; Namibia; New Guinea; Pakistan; Philippines; Senegal; Seychelles Islands; Sierra Leone; South Africa; Spain; Sri Lanka; Sudan; Taiwan; Tanzania; Thailand; Uganda; Vietnam; Yemen; Zambia; Zimbabwe (Barthélémy, 2014; Gadallah, 2020; Jonathan & Kundu, 2003; Kundu et al., 2006; Pulawski, 2020).
43. *Sphex deplanatus* Kohl, 1895 — India: Karnataka. *Elsewhere*: Sri Lanka; Vietnam; Yemen (Pulawski, 2020).
44. *Sphex diabolicus* Smith, 1858 — India: Arunachal Pradesh, Maharashtra, Pondicherry, Sikkim, West Bengal. *Elsewhere*: China (including Hong Kong); Indonesia; Japan; Korea; Laos; Malaysia; New Guinea; Philippines; Sri Lanka; Taiwan; Vietnam (Barthélémy, 2014; Dollfuss, 2008; Pulawski, 2020).
45. *Sphex fumicatus* Christ, 1791 — India: Maharashtra, South India, West Bengal. *Elsewhere*: Algeria; Angola; Argentina; Central African Republic; China; Cyprus; Democratic Republic of the Congo; Egypt; Ethiopia; Gabon; Greece; Guinea; Indonesia; Iran; Israel; Japan; Kenya; Kuwait; Mozambique; Namibia; Nepal; Oman; Pakistan; Saudi Arabia; Senegal; Sierra-Leone; Somalia; South Africa; Sri Lanka; Sudan; Tanzania; Turkey; United Arab Emirates; Yemen (André, 1888; Pulawski, 2020; Schmid-Egger, 2014).
46. *Sphex ichneumoneus* (Linnaeus, 1758) — India: Maharashtra. *Elsewhere*: Argentina; Barbados; Brazil; Canada; Costa Rica; Colombia; Cuba; Dominican Republic; Ecuador; France; Guyana; Jamaica; Nicaragua; Mexico; Panama; Paraguay; Puerto Rico; United States of America (Pulawski, 2020).
47. *Sphex neoumbrosus* Jha & Farooqi, 1996 — India: Karnataka (Jha & Farooqi, 1996; Pulawski, 2020).



48. *Sphex obscurus* (Fabricius, 1804) — India: Uttarakhand, West Bengal. *Elsewhere*: Ghana; Guinea; Iran; Mali; Sri Lanka; Thailand; Turkmenistan; United Arab Emirates (Pulawski, 2020).
49. *Sphex praedator* Smith, 1858 — India: Arunachal Pradesh, Assam, Kerala, Sikkim, Tamil Nadu, West Bengal. *Elsewhere*: China; Democratic Republic of the Congo; Egypt; Indonesia; Libya; Malaysia; Myanmar; Nepal; Philippines; South Africa; Sri Lanka; Taiwan; Tanzania; Thailand; Zambia; Zimbabwe (Bingham, 1897; Dollfuss, 2008; Kundu et al., 2006).
50. *Sphex pruinosus* Germar, 1817 — India: Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Afghanistan; Albania; Algeria; Bulgaria; Croatia; Cyprus; Egypt; Ethiopia; France; Greece; Hungary; Iran; Iraq; Israel; Italy; Kazakhstan; Kyrgyzstan; Lebanon; Libya; Macedonia; Malta; Morocco; Myanmar; Oman; Pakistan; Portugal; Qatar; Russia; Saudi Arabia; Spain; Sudan; Syria; Tajikistan; Tunisia; Turkey; Turkmenistan; United Arab Emirates; Uzbekistan; Western Sahara; Yemen (Gadallah, 2020; Pulawski, 2020).
51. *Sphex sericeus* (Fabricius, 1793) — India: Assam, Karnataka, Kerala, Maharashtra, Meghalaya, Odisha, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand, West Bengal. *Elsewhere*: Australia; Cambodia; Chagos Archipelago; China (including Hong Kong); Indonesia; Japan; Korea; Laos; Malaysia; Madagascar; Myanmar; New Guinea; Pakistan; Philippines; Sri Lanka; Taiwan; Thailand; Vietnam; Western Sahara; Yemen (Barthélémy, 2014; Jonathan & Kundu, 2003; Pulawski, 2020; Sudheendrakumar & Narendran, 1989).
52. *Sphex subtruncatus* Dahlbom, 1843 — India: Arunachal Pradesh, Himachal Pradesh, Karnataka, Kerala, Meghalaya, Sikkim, Tripura, Uttarakhand, Uttar Pradesh, West Bengal. *Elsewhere*: Bhutan; China (including Hong Kong); Ethiopia; Indonesia; Japan; Korea; Laos; Malawi; Myanmar; Nepal; Philippines; Singapore; Sri Lanka; South Africa; Taiwan; Thailand; Vietnam (Barthélémy, 2014; Dollfuss, 2008; Kundu et al., 2006; Pulawski, 2020).

**Genus 10. *Isodontia* Patton, 1880**

53. *Isodontia apicata* (Bingham, 1897) — India: Maharashtra (Bingham, 1897; Pulawski, 2020).
54. *Isodontia aurifrons* (Smith, 1859) — India: Karnataka, Sikkim. *Elsewhere*: Africa; Australia; China (including Hong Kong); Indonesia; Malaysia; Myanmar; New Guinea; Philippines; Thailand; Vietnam (Barthélémy, 2014; Dollfuss, 2008; Jonathan & Kundu, 2003; Pulawski, 2020).
55. *Isodontia diodon* (Kohl, 1890) — India: Kerala, Sikkim, Tamil Nadu, West Bengal. *Elsewhere*: Cambodia; China (including Hong Kong); Indonesia; Laos; Malaysia; Myanmar; Nepal; Singapore; Thailand; Vietnam (Barthélémy, 2014; Bingham, 1897; Dollfuss, 2008; Pulawski, 2020).
56. *Isodontia edax* (Bingham, 1897) — India: Sikkim. *Elsewhere*: China; Myanmar; Sri Lanka; Vietnam (Bingham, 1897; Jonathan & Kundu, 2003; Pulawski, 2020).
57. *Isodontia formosicola* (Strand, 1913) — India: Meghalaya. *Elsewhere*: China; Malaysia; Taiwan (Pulawski, 2020).
58. *Isodontia nigella* (Smith, 1856) — India: Gujarat, Uttarakhand, West Bengal. *Elsewhere*: Australia; China (including Hong Kong); Japan; Korea; Myanmar; New Guinea; Russia; Taiwan; Thailand (Barthélémy, 2014; Bingham, 1897; Pulawski, 2020).
59. *Isodontia nigelloides* (Strand, 1915) — India. *Elsewhere*: Sri Lanka (Pulawski, 2020).

60. *Isodontia ochroptera* (Kohl, 1890) — India: Meghalaya. *Elsewhere*: Bangladesh; China (including Hong Kong); Indonesia; Laos; Malaysia; Myanmar; Philippines; Thailand (Barthélémy, 2014; Dollfuss, 2008; Pulawski, 2020).
61. *Isodontia splendidula* (Costa, 1858) — India: Uttarakhand. *Elsewhere*: Algeria; Bulgaria; Croatia; France; Greece; Hungary; Israel; Italy; Spain; Russia; Turkey (Dollfuss, 2008; Pulawski, 2020).

**The Occurrence of following species in India remains doubtful:**

1. *Ammophila sabulosa* (Linnaeus, 1758): Radoszkowski, 1871 reported this species from Himalaya without mentioning the specific locality.
2. *Sphex gisteli* Strand, 1916: Strand (1916) originally described this species based on the specimen/specimens labeled as “India occidentalis” without mentioning the specific locality.
3. *Prionyx nigropectinatus* (Taschenberg, 1869): Kohl (1890) tentatively synonymised *Harpactopus nivosus* Smith, 1856 (reported from northern India) with *Sphex nigropectinatus*. The species ‘*nigropectinatus*’ is presently under the genus ‘*Prionyx*’. The present status of this species is doubtful.

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