



*\*Photo Credit: Josh's Frogs*

## Dart Frogs (Family Dendrobatidae)

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### **Tiny Gems of the Amazonian Rainforest**

Dart frogs are small, diurnal frogs which display what is known as brightly colored aposematic coloration that warns predators of their potential toxicity. They earn their names of poison dart or arrow frogs due to the Amerindian tendency to use the secretions from these frogs to line the tips of their hunting arrows and darts with. Depending on the species, some can be very brightly colored to warn of their toxicity, while others can be more cryptic in appearance. Depending on the species, they may be brightly colored with reds, oranges, yellows, blues, and greens. In order to obtain their toxicity, many dart frog species will consume specific prey items in the wild, and derive their toxins from them, including certain termites, ants, and other tiny invertebrates. Many species of dart frogs also have specialized reproductive biology, and may lay their eggs in tiny vernal pools, tree cavities, and standing water in bromeliads/other plants, and many will also carry their tadpoles on their backs. There are over 200 different species of dart frogs in at least 16 different genera, many of which are commonly available in captivity.

### **Taxonomy**

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota

**Kingdom:** Animalia

**Phylum/Sub Phylum:** Chordata/Vertebrata

**Class:** Amphibia

**Order:** Anura

**Suborder:** Neobatrachia

**Superfamily:** Dendrobatoidea

**Family:** Dendrobatidae

**Genera:** Adelphobates, Andinobates, Ameerega, Colostethus, Dendrobates, Epipedobates, Excidobates, Hyloxalus, Minyobates, Oophaga, Phyllobates, Ranitomeya, and Silverstoneia

*\*Taxonomy subject to change and revision.*

### **Lifespan and Longevity**

If provided the proper care, dart frogs can attain longevity of 5 to 10 years or more.

### **Distribution and Habitat**

Depending on the species, dart frogs are found in the humid, tropical climates of central and South America. Specifically, they may be found in Bolivia, Costa Rica, Brazil, Colombia, Ecuador, Venezuela, Suriname, Peru, Panama, Guyana, and Nicaragua. Different species of dart frogs may occupy different environments, including tropical to sub-tropical forests, lowland forests, freshwater marshes, lakes, and swamplands, to seasonally flooded grasslands and other areas, savannahs, to higher mountain/altitude forests.

### **Origin/History**

Dendrobatidae Cope, 1865. Each specific species would have other authors first describing them during other years.

Dart frogs have an extremely diverse array of origins and histories, depending on each specific or individual species available in herpetoculture/the pet trade. For more detailed and specific information about each of the many different species of dart frogs, see the Josh's Frogs webpage with profiles of each individual species: [Poison Dart Frogs \(joshfrogs.com\)](http://joshfrogs.com)

### **Experience Level Required**

Intermediate/Moderate to Advanced (depending on species).

### **Size**

Dart frogs are generally small frogs, although their size varies depending on the species. Dart frog species range from about less than ½ an inch to about 2 ½ inches.

### **Housing and Enclosure Plus Temperature, Lighting, and Humidity**

***Enclosure System: Primarily Moist-Terrestrial to Semi-Arboreal.*** Housing must be sealed and escape proof with a secured lid or aquarium hood. Housing for dart frogs should be naturalistic and mimic their natural environment as much as possible. Live plants should be used whenever possible to help maintain oxygen and humidity levels inside the vivarium. A 10 to 30 gallon planted glass terrarium, vivarium, or even custom made enclosure with ample hiding and climbing areas should be provided. Humidity should fall between 80 to 100%, but provide minimal ventilation. Maintain most dart frogs at temperatures from 70 to 80 degrees F, rarely above or below these temperature ranges. Many commercially available hydrometers can monitor humidity levels inside the enclosure. Dart frog enclosures can be maintained at around room temperature or sometimes with under tank heating pads in some cases. Covering 80 to 90% of the enclosure or vivarium with a sheet of glass can achieve the desired humidity levels. Also provide a “false bottom” constructed of quartz gravel, PVC, or charcoal to enable proper drainage from the vivarium. Substrates that are acceptable should retain humidity well and can include peat moss, fir bark, and sphagnum moss. Dart frogs also benefit from misting, and should be misted every 1 to 3 days. Many commercially available automatic and manual homemade misting systems are available for use. UVA/UVB lighting is not required for dart frogs, but can improve aesthetics and fluorescent bulbs can help mimic a 12 hour light cycle to promote optimal live plant growth by using full spectrum terrarium or aquarium bulbs. Providing UVA/UVB in moderated amounts can also be greatly beneficial for your frog's health, immune system, and overall wellness. For any supplemental heating that may be needed, use a low wattage incandescent or UVA/UVB bulb, radiant or ceramic heat emitter, or UTH (under tank heating element). More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

### **Feeding, Diet, and Nutrition**

***Microphagous to Insectivorous;*** In the wild, dart frogs are almost entirely microphagous to insectivorous, feeding on tiny, live, moving insects, arthropods, and other invertebrates. In

captivity, it is recommended that dart frogs be provided cultured flightless fruit flies, springtails, isopods, or pinhead crickets. Many of these food items may need supplementation with calcium, vitamin D3, and other multi vitamins, which are commonly available through many commercial and retail outlets. If left as part of a self-sustaining bioactive setup, feeding most dart frogs can become very simple and inexpensive, although this still depends to some extent on the setup, size of the enclosure, and number of frogs per enclosure, and conditions should still be monitored. Feeding amounts and frequency can also still depends on the age and size of the frogs as well. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

### **Handling**

Dart frogs are small and fragile amphibians, and handling them should thus be reduced or eliminated as much as possible. In most cases, there is very little to no risk of ingesting toxic secretions from captive bred/born dart frogs, most of which derive their toxins from invertebrates consumed in the wild. All amphibians breathe and respire through their skin, as well as absorb water through this means. It is therefore important to avoid wearing any chemicals or lotions on your hands, which can be potentially harmful or even fatal to amphibians. It is also important to wash or rinse hands thoroughly, and ensure they are adequately moistened before and after handling any amphibians in order to prevent them from drying out.

**\*\*Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens\*\***

### **Contact**

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*Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.*

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### **Full List of Dendrobatidae Genera and Species:**

Adelphobates- 3 Species:

*Adelphobates castaneoticus*-Brazilian Nut Poison Frog

*Adelphobates galactonotus*-Splash-Backed Poison Frog

*Adelphobates quinquevittatus*-Amazonian/Rio Madeira Poison Frog

Andinobates-19 Species:

*Andinobates abditus*

*Andinobates altobueyensis*

*Andinobates bombetes*

*Andinobates cassidyhornae*

*Andinobates claudiae*

*Andinobates daleswansonii*

*Andinobates dorisswansonae*

*Andinobates fulguritus*

*Andinobates geminisae*

*Andinobates minutus*

*Andinobates opisthomelas*

*Andinobates tolimensis*

*Andinobates victimatus*

*Andinobates viridis*

*Andinobates virolinensis*

*sp. Supata*

*sp. Colombia*

*sp. Columbia*

*aff. fulgaritus*

Ameerega-34 Species:

*Ameerega altamazonica*

*Ameerega bassleri*

*Ameerega berohoka*

*Ameerega bilinguis*

*Ameerega boehmei*

*Ameerega boliviana*

*Ameerega braccata*

*Ameerega cainarachi*

*Ameerega flavopicta*

*Ameerega hahneli*

*Ameerega ignipedis*

*Ameerega imasmari*

*Ameerega ingeri*

*Ameerega labialis*

*Ameerega macero*

*Ameerega maculata*

*Ameerega munduruku*

*Ameerega panguana*

*Ameerega parvula*

*Ameerega pepperi*

*Ameerega peruviridis*  
*Ameerega petersi*  
*Ameerega picta*  
*Ameerega planipaleae*  
*Ameerega pongoensis*  
*Ameerega pulchripecta*  
*Ameerega rubriventris*  
*Ameerega shihuemoy*  
*Ameerega silverstonei*  
*Ameerega simulans*  
*Ameerega smaragdina*  
*Ameerega trivittata*  
*Ameerega yoshina*  
*Ameerega yungicola*

Colostethus-18 Species:

*Colostethus agilis*  
*Colostethus alacris*  
*Colostethus dysprosium*  
*Colostethus furviventris*  
*Colostethus imbricolus*  
*Colostethus inguinalis*  
*Colostethus jacobuspetersi*  
*Colostethus latinasus*  
*Colostethus lynchi*  
*Colostethus mertensi*  
*Colostethus panamansis*  
*Colostethus poecilonotus*  
*Colostethus pratti*  
*Colostethus ruthveni*  
*Colostethus thorntoni*  
*Colostethus ucumari*  
*Colostethus yaguara*  
*sp. 1. Santander*

Dendrobates-5 Species:

*Dendrobates auratus*-Green and Black Poison Dart Frog  
*Dendrobates leucomelas*-Yellow Banded Poison Dart Frog  
*Dendrobates nubeculosus*-Rockstone Poison Dart Frog  
*Dendrobates tinctorius*-Dyeing Poison Dart Frog  
*Dendrobates truncatus*-Yellow Striped Poison Dart Frog

Ectopoglossus-7 Species:

*Ectopoglossus absconditus*  
*Ectopoglossus astralogaster*  
*Ectopoglossus atopoglossus*  
*Ectopoglossus confuscus*  
*Ectopoglossus isthminus*

*Ectopoglossus lacrimosus*  
*Ectopoglossus saxatilis*

Epipedobates-7 Species:

*Epipedobates anthonyi*-Anthony's Poison Arrow Frog  
*Epipedobates boulengeri*-Marbled Poison Arrow Frog  
*Epipedobates darwinwallacei*-Darwin Wallace Poison Arrow Frog  
*Epipedobates espinosai*  
*Epipedobates machalilla*  
*Epipedobates narinensis*  
*Epipedobates tricolor*

Excidobates-3 Species:

*Excidobates captivus*-Santiago Poison Frog  
*Excidobates condor*  
*Excidobates mysteriosus*- Maronon Poison Frog

Leucostethus-6 Species

*Leucostethus argyrogastrus*  
*Leucostethus ramirezi*  
*Leucostethus fugax*  
*Leucostethus fraterdanieli*  
*Leucostethus brachistriatus*  
*Leucostethus jota*

Hyloxalus-69 Species:

*Hyloxalus abditaurantius*  
*Hyloxalus aeruginosus*  
*Hyloxalus anthracinus*  
*Hyloxalus arliensis*  
*Hyloxalus awa*  
*Hyloxalus azureiventris*-Sky-Blue Poison Frog  
*Hyloxalus betancuri*  
*Hyloxalus bocagei*  
*Hyloxalus borjai*  
*Hyloxalus breviquartus*  
*Hyloxalus cepedai*  
*Hyloxalus cevallosi*  
*Hyloxalus chlorocraspedus*  
*Hyloxalus chocoensis*  
*Hyloxalus craspedocephalus*  
*Hyloxalus delatorreae*  
*Hyloxalus edwardsi*  
*Hyloxalus elachyhistus*  
*Hyloxalus eleutherodactylus*  
*Hyloxalus exasperatus*  
*Hyloxalus excisus*

*Hyloxalus faciopunctulatus*  
*Hyloxalus fallax*  
*Hyloxalus fascianigrus*  
*Hyloxalus felixcoperari*  
*Hyloxalus fuliginosus*  
*Hyloxalus idiomelus*  
*Hyloxalus infraguttatus*  
*Hyloxalus insulatus*  
*Hyloxalus italo*  
*Hyloxalus jacobuspetersi*  
*Hyloxalus lehmanni*  
*Hyloxalus leucophaeus*  
*Hyloxalus littoralis*  
*Hyloxalus maculosus*  
*Hyloxalus maquipucuna*  
*Hyloxalus marmoreoventris*  
*Hyloxalus mittermeieri*  
*Hyloxalus mystax*  
*Hyloxalus nexipus*  
*Hyloxalus parvus*  
*Hyloxalus patitae*  
*Hyloxalus peculiaris*  
*Hyloxalus peruvianus*  
*Hyloxalus picachos*  
*Hyloxalus pinguis*  
*Hyloxalus pulchellus*  
*Hyloxalus pulcherrimus*  
*Hyloxalus pumilus*  
*Hyloxalus ramosi*  
*Hyloxalus ruizi*  
*Hyloxalus saltuarius*  
*Hyloxalus sanctamariensis*  
*Hyloxalus sauli*  
*Hyloxalus shuar*  
*Hyloxalus sordidatus*  
*Hyloxalus spilotogaster*  
*Hyloxalus subpunctatus*-Cream-Backed Poison Frog  
*Hyloxalus sylvaticus*  
*Hyloxalus toachi*  
*Hyloxalus utcubambensis*  
*Hyloxalus vergeli*  
*Hyloxalus vertebralis*  
*Hyloxalus whymperi*  
*Hyloxalus yasuni*  
*sp. 1. Supata*  
*sp. 2. Bilsa*  
*sp. 3. Ibague*  
*sp. 4. Santander*

Minobytes-1 Species:

*Minobytes steyermarki*-Demonic/Yapacana's Little Red Poison Dart Frog

Oophaga-9 Species:

*Oophaga arborea*-Polkadot Poison Frog  
*Oophaga granulifera*- Granular Poison Frog  
*Oophaga histrionica*-Harlequin Poison Frog  
*Oophaga lehmanni*-Lehmann's Poison Frog  
*Oophaga occultator*- La Brea Poison Frog  
*Oophaga pumilio*-Strawberry Poison Frog  
*Oophaga speciosa*- Splendid Poison Frog  
*Oophaga sylvatica*- Diablito Poison Frog  
*Oophaga vicentei*- Vicente's Poison Frog

Paruwrobates-3 Species:

*Paruwrobates erythromos*-Palenque Poison Frog  
*Paruwrobates andinus*-La Planada Poison Frog  
*Paruwrobates whymperi*

Phyllobates-6 Species:

*Phyllobates lugubris*-Lovely Poison Frog  
*Phyllobates vittatus*- Golfodulcean Poison Frog  
*Phyllobates bicolor*-Black Legged Poison Frog  
*Phyllobates aurotaenia*- Kokoe Poison Frog  
*Phyllobates terribilis*- Golden Poison Frog  
*Phyllobates spec. aff. aurotaenia*

Ranitomeya-16 Species:

*Ranitomeya amazonica*  
*Ranitomeya benedicta*  
*Ranitomeya cyanovittata*  
*Ranitomeya defleri*  
*Ranitomeya fantastica*  
*Ranitomeya flavovittata*  
*Ranitomeya imitator*  
*Ranitomeya reticulata*  
*Ranitomeya sirensis*  
*Ranitomeya summersi*  
*Ranitomeya toraro*  
*Ranitomeya uakarii*  
*Ranitomeya vanzolinii*  
*Ranitomeya variabilis*  
*Ranitomeya ventrimaculata*  
*Ranitomeya yavaricola*

Silverstoneia-9 Species:

*Silverstoneia dalyi*

*Silverstoneia erasmios*  
*Silverstoneia flotator*  
*Silverstoneia gutturalis*  
*Silverstoneia minima*  
*Silverstoneia minutissima*  
*Silverstoneia nubicola*  
*Silverstoneia punctiventris*

Allobates (Aromobatitidae, Sister Taxa)-58 Species:

*Allobates alessandroi*  
*Allobates algorei*  
*Allobates amissibilis*  
*Allobates bacurau*  
*Allobates bromelicola*  
*Allobates brunneus*  
*Allobates caeruleodactylus*  
*Allobates carajas*  
*Allobates caribe*  
*Allobates chalcopis*  
*Allobates conspicuus*  
*Allobates crombiei*  
*Allobates femoralis*  
*Allobates flaviventris*  
*Allobates fratisenescus*  
*Allobates fuscillus*  
*Allobates gasconi*  
*Allobates goianus*  
*Allobates granti*  
*Allobates grillismilis*  
*Allobates hodli*  
*Allobates humilis*  
*Allobates ignotus*  
*Allobates insperatus*  
*Allobates juami*  
*Allobates juanii*  
*Allobates kingsbury*  
*Allobates magnussoni*  
*Allobates mandelorum*  
*Allobates marchesianus*  
*Allobates masniger*  
*Allobates mcdiarmidi*  
*Allobates melanolaemus*  
*Allobates myersi*  
*Allobates nidicola*  
*Allobates niputidea*  
*Allobates nunciatus*  
*Allobates olfersioides*  
*Allobates ornatus*  
*Allobates pacaas*  
*Allobates paleovarzensis*

*Allobates pittieri*  
*Allobates ranoides*  
*Allobates sanmartini*  
*Allobates spumaponens*  
*Allobates subfolionidificans*  
*Allobates sumtuosus*  
*Allobates talamancae*  
*Allobates tapajos*  
*Allobates tinae*  
*Allobates trilineatus*  
*Allobates undulatus*  
*Allobates vanzolinus*  
*Allobates wayuu*  
*Allobates zaparo*  
*Allobates sp. 1. Colombia*  
*Allobates sp. 2. Peru*  
*Allobates sp. 3. Peru*

Anomaloglossus (Aromobatidae, Sister Taxa)-32 Species:

*Anomaloglossus apiau*  
*Anomaloglossus ayarzaguenai*  
*Anomaloglossus baeobatrachus*  
*Anomaloglossus beebei*  
*Anomaloglossus blanci*  
*Anomaloglossus breweri*  
*Anomaloglossus degranvillei*  
*Anomaloglossus dewynteri*  
*Anomaloglossus guanayensis*  
*Anomaloglossus kaiei*  
*Anomaloglossus leopardus*  
*Anomaloglossus meansi*  
*Anomaloglossus megacephalus*  
*Anomaloglossus mitaraka*  
*Anomaloglossus moffetti*  
*Anomaloglossus murisipanensis*  
*Anomaloglossus parimae*  
*Anomaloglossus parkerae*  
*Anomaloglossus praderioi*  
*Anomaloglossus roraima*  
*Anomaloglossus rufulus*  
*Anomaloglossus saramaka*  
*Anomaloglossus shrevei*  
*Anomaloglossus stepheni*  
*Anomaloglossus surinamensis*  
*Anomaloglossus tamacuarensis*  
*Anomaloglossus tepequem*  
*Anomaloglossus tepuyensis*  
*Anomaloglossus triunfo*  
*Anomaloglossus vacheri*  
*Anomaloglossus verbeeksnyderorum*

*Anomaloglossus wothuja*

Aromobates (Aromobatidae, Sister Taxa)-21 Species:

*Aromobates alboguttatus*  
*Aromobates cannatellai*  
*Aromobates capurinensis*  
*Aromobates duranti*  
*Aromobates ericksonae*  
*Aromobates haydeae*  
*Aromobates leopardalis*  
*Aromobates mayorgai*  
*Aromobates meridensis*  
*Aromobates molinarii*  
*Aromobates nocturnus*  
*Aromobates ornatissimus*  
*Aromobates orostoma*  
*Aromobates saltuensis*  
*Aromobates serranus*  
*Aromobates tokuko*  
*Aromobates waltherarpi*  
*Aromobates zippeli*  
*Sp. Venezuela*  
*Sp. aff. cannatellai*  
*Sp. aff. saluensis*

Mannophryne (Aromobatidae, Sister Taxa)- 22 Species:

*Mannophryne caquetio*  
*Mannophryne collaris*  
*Mannophryne cordilleriana*  
*Mannophryne herminae*  
*Mannophryne lamarcai*  
*Mannophryne larandina*  
*Mannophryne leonardo*  
*Mannophryne molinai*  
*Mannophryne neblina*  
*Mannophryne oblitterata*  
*Mannophryne olmonae*  
*Mannophryne orellana*  
  
*Mannophryne riveroi*  
*Mannophryne speeri*  
*Mannophryne trinitatis*  
*Mannophryne trujillensis*  
*Mannophryne urticans*  
*Mannophryne venezuelensis*  
*Mannophryne vulcano*  
*Mannophryne yustizi*  
*Sp. 1. Aff. caquetio*  
*Sp. 1. Aff. trinitatus*

Rheobates (Aromobatidae, Sister Taxa)- 2 Species:

*Rheobates palmatus*

*Rheobates pseudopalmatus*