# **Emperor Scorpion**

Pandinus imperator



LIFE SPAN: 6-8 years AVERAGE ADULT SIZE: 5-8 inches

\* If temp falls below 70 at night, may need supplemental infrared or ceramic heat.

**WILD HISTORY:** Emperor Scorpions are from the tropical rainforests of West Africa – the Ivory Coast, Senegal, Ghana and Sierra Leone. These scorpions dig deep burrows in the rainforest floor for their homes.

**PHYSICAL CHARACTERISTICS:** Scorpions are arachnids. Arachnids are terrestrial arthropods, which have simple eyes and four pairs of legs. Spiders, ticks and mites are also arachnids. Scorpions have tough shells (exoskeleton), which are generally black, but as babies they are white. Scorpions have tiny eyes, two large pincher claws, eight legs and long, upward turning tails with a stinging tip.

**NORMAL BEHAVIOR & INTERACTION:** Nocturnal. Docile and tolerant, scorpions can be handled, but handling may cause stress to the animal. Scorpions do sting with their tail (telson), which has been compared to a bee sting. It is possible that some people can have an anaphylactic reaction to the venom from an emperor scorpion, but the odds are low as the venom is not very strong. The pinchers (pedipalps) of the scorpion are very strong for their size. Scorpions breed rather easily in captivity. Mothers will carry the tiny, white babies on her back. However, the mother will occasionally cannibalize her young when stressed.

**NOTE**: DO NOT house scorpions with other species due to the differences in care, temperatures, and the fact that some species can be highly stressed in the presence of other species. Each species may also harbor different parasites/protozoans/bacteria (even a healthy animal harbors a small amount at all times), which may make each other ill.

Emperor scorpions can live together in groups IF there is ample space and food for each scorpion in the enclosure. Scorpions <u>will</u> fight to the <u>death</u> over food, so care must be taken to supply plenty of space AND plenty of food.

#### **FEEDING:** Carnivorous - live food

Protein sources such as: gut-loaded crickets, mealworms, cockroaches, kingworms, and wax worms dusted with a supplement can be part of the scorpion diet.

Wild caught insects should never be fed, since they can carry disease. All insects should be gut loaded (fed a nutritious diet about 24-hours before being offered to your scorpion – see our cricket care sheet).

Adults should be fed about 3-6 large crickets per week (or other prey equaling about this amount) Feed every other day, at night, as they are nocturnal.

#### LIGHTNING BUGS MUST NEVER BE FED. THEY ARE POISONOUS.

**SHEDDING (MOLTING):** Emperor Scorpions have a tough, outer exoskeleton. Molting this "shell" improperly is the leading cause of death in pet scorpions. A new skin forms under the old exoskeleton. When the new skin has formed, the old exoskeleton is shed off and the new skin is revealed. The molting process is a very difficult process and expends much of the scorpion's energy; your pet may become very lethargic for a day or two post-shed. Also, until the new skin hardens, the scorpion is very vulnerable to injury.

If the enclosure's humidity levels are not ideal, your scorpion can lose legs and claws during the molting process. Death may also occur. Because of this, it is obviously extremely important to maintain proper humidity levels.

**SUPPLEMENTS:** Dust food with calcium supplement and vitamin supplements. As a rule, a growing juvenile's food (and a pregnant/gravid female's) should be dusted more often than an adult's. Follow your veterinarian's instructions for applying supplements to avoid over-supplementing food.

Our veterinarian recommends dusting insects with a good quality calcium supplement fortified with vitamin D3, 1-2 times a week. (Avoid using a calcium supplement with added phosphorous, unless specifically directed by your veterinarian, since this can promote disease.)

Always consult your veterinarian for specific directions on supplementing your pet's food, since there are many variables that go into determining the best supplementing regimen for each animal.

**WATER:** A shallow dish of clean fresh chlorine-free water must always be available. Place it on the cool side of your scorpion's enclosure. Change it daily, or as needed. All water given to your pet for drinking, as well as water used for misting, soaking or bathing must be 100% free of chlorine and heavy metals. (Not all home water filtration systems remove 100% of the chlorine and heavy metals from tap water). We recommend that you use unflavored bottled drinking water or bottled natural spring water; never untreated tap water. If tap water is used, you should treat it with a de-chlorinating treatment. De-chlorinator is available in the pet store fish department. If you do not want to chemically de-chlorinate the water, you can leave an open container of tap water out for at least 24 hours. Do not use distilled water, which can cause severe medical problems, since it lacks minerals that are essential to important body functions. If only tap water can be used, at least de-chlorinate the water.

A daily misting or two with chlorine-free water will also be appreciated. However, care should be taken not to allow the enclosure to become damp. Also, do not mist less than two hours before turning the heat lamps off for the day, as the droplets will not have proper time to dry and may contribute to respiratory disease.

#### **RECOMMENDED SUPPLIES:**

*10-40 gallon aquarium or breeder tank or larger.	*Light dome and basking bulb
*Under tank heater – placed under same side of tank as basking light	*Temperature / humidity gauge – do not stick to side of tank
*Dry hide house – several if there are multiple scorpions	*Coconut fiber substrate, moistened
*Very shallow water dish	*Scorpion book

**HOUSING & ENVIRONMENT:** Invertebrates like emperor scorpions are ectothermic, or cold-blooded, which means they are dependent on the temperature of their immediate environment to regulate their body temperature. Therefore, we must create an environment with several heat gradients – warm on one end and cool on the other. With this set-up, your pet can go to either end depending on whether he needs to be warmer or cooler.

**ENCLOSURE SIZE:** The enclosure should be a solid glass sided tank long enough to create the two separate temperature gradients (warm and cool); an emperor scorpion tank should be about 10 gallons for an adult. Remember to provide enough space and food for groups of scorpions in order to avoid fighting (20 – 40 gallons) IT IS NOT TRUE THAT AN ANIMAL WILL ONLY GROW AS LARGE AS ITS ENCLOSURE ALLOWS!!

**COVER**: Make sure the cage has an escape-proof metal mesh top. It should fit snuggly onto the tank and have strong clips locking it on. It is important that the top is METAL mesh, as you will place the heat lamp directly on top of this cover.

**HEAT PAD:** Reptile heat pads can be adhered directly onto the underside of the glass bottom of the tank. Stick the pad on the glass on one of the very far ends of the tank (opposite the water dish). For safety reasons, make sure to attach the rubber feet (contained in the box) at all four corners of the underside of the tank. This will allow air to circulate underneath the tank and prevent the heat from being trapped under the tank. Leave the heat pad ON 24 hours a day.

A human-grade heat pad may be used on the low to medium setting. Do be sure to allow for proper ventilation for safety reasons. \*\*Be sure to purchase a heat pad without automatic shut-off, which are still available.

Heat pads specifically manufactured for reptiles and human-grade heat pads are safe to leave on 24 hours a day. DO NOT use reptile heat rocks. They heat unevenly and have caused severe thermal burns in reptiles and amphibians.

**HEAT LAMP:** Place the heat dome with the basking bulb on top of the cage directly over where the reptile heat pad has been placed on the underside of one end of the tank. The heat lamp should be turned on in the morning, and off at night. (See "Day/Night Light Cycles" below.

Follow directions carefully with all products – READ THE INSTRUCTION SHEET!!

Always choose fixtures with ceramic sockets and be careful to choose the socket that is properly rated for the wattage bulb that you will be using. Do not place the fixtures by dry wood or flammable fabrics.

All heaters should be placed out of the reach of children and all pets – including cats and dogs.

Be very careful to make sure that your caged pet cannot reach and touch the heating device in its own cage. A thermal burn to the face or body can be painful and life threatening.

UVB LIGHT: UV light is extremely dangerous to scorpions – it can kill them. DO NOT use supplemental UV light or place the cage in direct sunlight!!

Also, DO NOT use black lights - they are also dangerous for your scorpion.

**HIDE HOUSE:** Place a hide house inside the cage directly over where you have positioned the heat pad, and directly under the heat lamp above. Place several more hide houses around the cage if you have a group of scorpions. Each will need its own hiding place.

**WATER BOWL:** The water dish can be placed on the opposite end of the cage.

**BEDDING:** Scorpions love to dig burrows. We recommend a loose coconut fiber substrate, available in the reptile department and made by several companies. It is made from the husks of coconuts. This substrate is ideal for scorpions, as it will help hold humidity in and is also a perfect substrate for plants. Keep the substrate slightly damp, but not watery. A depth of about three inches should be just right.

**BRANCHES & PLANTS:** Emperor Scorpions do not generally climb; branches and plants are not necessary, but can be included for decoration.

**TEMPERATURES:** Cage temperatures should be monitored daily and kept at the temperatures listed at the top of this page. Use your reptile thermometer to check the temperatures in different places in the cage regularly to make sure they continually match the listed proper temperatures.

\* If the room temperature falls below 70 degrees at night, a supplemental infrared or ceramic heat fixture may be necessary. (These fixtures do not emit a light spectrum that is visible to the scorpion, so it will not disturb him at night, but they WILL provide the necessary supplemental heat.)

If your scorpion <u>does not</u> receive the proper heat at the proper temperatures, he may become sick with issues such as respiratory-like disease and may stop eating, as scorpions have a hard time digesting their food without proper heat.

**DAY/NIGHT LIGHT CYCLES AND HEATING:** All scorpions must have distinct day and night periods in their enclosure to maintain their biological rhythms. Scorpions need 8-12 hours of daytime and 8-12 hours of night time. However, as the daylight hours change seasonally outside, daylight hours inside the tank should reflect the same.

### The day period must be light, and the night period must be dark.

A timer should be used to set day/night periods.

**HABITAT MAINTENANCE:** Daily maintenance should consist of spot cleaning by removing soiled substrate, cleaning water bowl thoroughly and wiping glass clean.

## DO NOT PERFORM A THOROUGH CLEANING IF YOUR SCORPION IS MOLTING!

The entire tank should be cleaned thoroughly at least once every month with:

- A mild dishwashing liquid (a weak dilution) in warm water, THEN
- Vinegar & water (1:8) OR bleach and warm water (1:32)
- Cage "furniture" should also be scrubbed clean with the same dilution.
- RINSE OFF ALL SOAP AND BLEACH THOROUGHLY WITH PLAIN WATER BEFORE RE-INTRODUCING YOUR PET TO ITS ENCLOSURE!!
- NEVER MIX VINEGAR AND BLEACH IT CREATES A TOXIC SOLUTION
- NOTE: water used for cleaning does not need to be de-chlorinated, as your pet will not be drinking it or bathing
  in it.

**GROOMING & HYGIENE:** To reduce the risk of contracting and spreading salmonella poisoning, all handlers should wash their hands after handling.

**SIGNS OF A HEALTHY ANIMAL:** smooth, even body; no traces of mites (small, reddish brown spots around face area, rounded, full body; strong, even, fat, rounded tail, regular record of healthy feeding schedule. It is very important to keep a journal for each animal that records feeding, refusal, shedding, unusual behavior, changes in behavior and dates of bulb changes. This will help your veterinarian trouble-shoot any health issues.

**SIGNS OF ILLNESS:** Irregular body colorations; small reddish brown spots (mites) around face area, dull colored body when not in a shed; thinned body; irregular feeding and habits. Limp, thin body, lethargy; obvious bite marks or wounds from cage mate or prey.

#### **SOME COMMON PROBLEMS INCLUDE:**

<b>HEALTH ISSUE:</b>	SYMPTOMS:	TREATMENT:
GI parasites i.e.: flagellates, motile protozoa	Small reddish-brown spots around eyes, mouth & on body or in substrate.  However, pet may show no signs of harboring parasites besides declining health.	See an exotic pet veterinarian for analysis of specific parasite and medicinal treatment.
Shedding problems – loss of legs	Missing appendages	See exotic pet veterinarian for treatment of current problem. Optimize enclosure heat and humidity.
Trauma	Outward signs of biting, tearing, stress, aggression	See exotic pet veterinarian. Adjust enclosure occupants. Avoid overcrowding and mixing of species.

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