# New record and distribution of Loxosceles amazonica Gertsch, 1967 (Araneae: Sicariidae) in the state of Ceará, Brazil 

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#### Abstract

The spiders of the genus Loxosceles Heineken \& Lowe, 1832 have a wide distribution in tropical and temperate regions and 30 species have been recorded for South America. The amazonica group is represented only by Loxosceles amazonica, and there are records from the north, midwest and northeast of Brazil. The aim of this note is to present a new record of L. amazonica for the municipal district of Sobral, in the state of Ceará, Brazil and produce a check-list of this species in this state.


The genus Loxosceles Heineken \& Lowe, 1832, belongs to family Sicariidae and have wide distribution in tropical and temperate regions, being present in the south of Europe, in Africa, and in the Americas (Platnick 2013). Some characteristics are recognizable to this genus as the carapace moderately longer than wider with median groove deep, six eyes subequals in size, long and slender legs, with row of black hairs and heavier setae (Gertsch 1967). Currently, there are 100 species described in the genus, whose 30 species have been recorded for South America (Platnick 2013).

The genus is divided in four groups in South America and all are represented in Brazil: gaucho, laeta, spadicea and amazonica groups. The amazonica group is represented only by Loxosceles amazonica and this species is recorded from north, midwest and northeast of Brazil (Gertsch 1967). In the northeast of Brazil, there are records of occurrence of L. amazonica for the states of Bahia (Brazil et al. 2009), Paraíba (Albuquerque et al 2004), Pernambuco (Gertsch 1967; Freitas et al. 2006) and Piauí (Carvalho and Avelino 2010).

In the natural environments, these spiders can be found in a variety of habitats, such as under rocks, on tree trunks, in caves, in the crevices of the soil, and in both arid and hot environments as well as humid places (Gertsch 1967; Silva and Ferreira 2009).

Three specimens (one female and two juveniles) of $L$. amazonica were collected manually inside a residence located downtown of the Municipality of Sobral ( $30^{\circ} 41^{\prime} 17.40^{\prime \prime} \mathrm{S}, 40^{\circ} 21^{\prime} 14.28^{\prime \prime} \mathrm{W}$ ). Most of the territorial area of the Municipal District of Sobral is composed open shrubby Caatinga, riparian and carnauba areas (Ipece 2011). The Caatinga Domain is formed by a semi-arid climate. The main type of vegetation is xerophytic, woody, thorny and deciduous vegetation with
a seasonal herbaceous layer associated with scarce rainfall distribution (Veloso et al., 1991).

The specimens were observed and identified using a Stereoscopic Microscopic Leica M50, illuminated with a Fiber Optic illuminator L2 coupled to microscope and identification was done by comparison with material housed in the collection of the Instituto Butantan and description presented by Gertsch (1967).

They were deposited in the Collection of Arachnida and Myriapods of Instituto Butantan, São Paulo (IBSP, curator: D. M. Barros Battesti). The records presented for the state of Ceará were also obtained from collections of Arachnida of the Instituto Butantan, São Paulo (IBSP), and from records found in literature (Table 1), resulting in seven records of occurrence of L. amazonica for the state of Ceará (Figure 1).


Figure 1. Occurrence of Loxosceles amazonica in the state of Ceará. Map adapted from IPECE (2011). Geographic coordinates obtained by Datum: SAD69.

TABLE 1. Records of L. amazonica in the state of Ceará. Data obtained by research at IBSP and literature.

| MUNICIPALITIES | COLLECTOR | YEAR | COLLECTION NUMBER IBSP, OR BIBLIOGRAPHIC REFERENCE |
| :---: | :---: | :---: | :---: |
| Crato ( $07^{\circ} 14^{\prime} \mathrm{S}, 39^{\circ} 24^{\prime} \mathrm{W}$ ) | Farias, M.A.A. | 1993 | IBSP 6009; 5979 |
| Caverna Sobradinho, Sítio Pé Queimado, Aiuaba ( $06^{\circ} 34^{\prime}$ S, $40^{\circ} 7^{\prime} \mathrm{W}$ ) | Trajano, E; Bichuette, M.E; Aparecida, L.A. | 2002 | IBSP 56059 |
| Caverna Sobradinho, Araripe ( $07^{\circ} 12^{\prime} \mathrm{S}-40^{\circ} 2^{\prime} \mathrm{W}$ ) | Trajano, E; Bichuette, M.E; Aparecida, L.A. | 2002 | IBSP 56061 |
| Interior da Pedra Fedorenta, Crato ( $07^{\circ} 14^{\prime} \mathrm{S}, 39^{\circ} 24^{\prime} \mathrm{W}$ ) | Trajano, E; Bichuette, M.E; Aparecida, L.A. | 2002 | IBSP 56051 |
| Serra das Almas, Crateús ( $05^{\circ} 10^{\prime} \mathrm{S}-40^{\circ} 40^{\prime} \mathrm{W}$ ) | Carvalho, M. | 2005 | Carvalho and Brescovit (2005) |
| Parque Nacional de Ubajara, Ubajara ( $03^{\circ} 51^{\prime} \mathrm{S}-40^{\circ} 55^{\prime} \mathrm{W}$ ) | Loebmann, D. | 2007 | IBSP 89326 |
| Parque Nacional de Ubajara, Ubajara $\left(03^{\circ} 48^{\prime}-03^{\circ} 50^{\prime} \mathrm{S}\right.$, $40^{\circ} 52^{\prime}-40^{\circ} 55^{\prime} \mathrm{W}$ ) | Silva, M.S.; Ferreira, R.L. | 2009 | Silva and Ferreira (2009) |
| Fazenda Experimental da Universidade Federal do Ceará , Pentecoste, ( $03^{\circ} 49^{\prime}$ S, $39^{\circ} 20^{\prime}$ W) | Azevedo, R.; Quinet, Y.P. | 2009 | IBSP (97966-97970) |
| Sobral ( $03^{\circ} 41^{\prime} 17.40^{\prime \prime} \mathrm{S}, 40^{\circ} 21^{\prime} \mathrm{W}$ ) | Azevedo, R.; Texeira, P.M.S; Siqueira, R. C.L. | 2010 | IBSP 161372 |

All records here presented for the state of Ceará (Table 1) show the preference of this species by the arboreal and shrubby Caatinga and only in Sobral, a specimen was collected for the first time in urban area. For us, this seems to be a problem in the collected areas, since probably the species is common is all urban areas from biome Caatinga, but it is notified only when accidents with people or animals occur, and not regularly in samples to test the diversity of spiders of these areas.

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