

OBSERVATIONS ON AN ENVIRONMENTAL ASSOCIATION
BETWEEN ENTELECARA ERYTHROPUS (Westr.) (LINYPHIIDAE)
AND CINIFLO SIMILIS Blk. (DICTYNIDAE)

by M.J.ROBERTS

Whilst living in Sheffield, I collected a large number of specimens of Entelecara erythropus. These were all taken from under large stones and debris in gardens, and I noticed that they often shared the undersides of stones with Ciniflo similis and occasionally with Ciniflo ferox. I did not at first keep a record of the number of times that these two spiders were found together, but of the last twelve specimens of E.erythropus taken, 7 were in the company of C.similis and one with C.ferox. I then moved to Scunthorpe.

Soon after my arrival, last year, I noticed that there were many webs of C.similis under the eaves of the garage about 6 feet above the ground. Moving about within the meshes of these webs were many small black Linyphiids. I collected about 30 of these from Ciniflo webs along the length of the garage. All were E.erythropus, males and females.

The numbers decreased during the winter months but in April/May the numbers began to increase again, and by June I could go out and easily count 30-40 specimens, random samples yielding nothing but E.erythropus.

During the day the C.similis are out of sight and E.erythropus can be seen walking freely through the webs, often spinning threads of their own within those of Ciniflo. They can be seen scavenging as well as catching small fry of their own. During the night the Ciniflo can be seen stalking out in the open and the Linyphiids continue to wander about unharmed. Is E.erythropus distasteful to C.similis and therefore safe from attack ?

On several occasions I confined C.similis and E.erythropus together in a glass tube and no attempt was made by the Ciniflo to attack the Linyphiid. I then confined them to a smaller tube so that one could hardly avoid the other. There was still no reaction. I shook the tube until the Linyphiid lay directly under the chelicerae of the Ciniflo. The Linyphiid moved for an instant but then drew in its legs and became perfectly still. Suddenly the Ciniflo started frantically to move back and forth along the tube trying, apparently, to get away from the Linyphiid, and then began to exude large amounts of straw-coloured fluid from its mouth. The Linyphiid remained still. I never once saw a Ciniflo actually bite E.erythropus, so there must be some chemotactic mechanism at work which produces revulsion and precludes an actual bite.

I then turned my attention to the finding of E.erythropus in other parts of the garden. Despite repeated sieving of litter, beating of bushes and grubbing around, only 3 specimens of E.erythropus were found, in marked contrast to the large numbers along the garage eaves. One of these specimens was found by beating a low branch of elder close to the garage, another wandering along the path, and the third on a garden fence. This last specimen was about 12 inches away from a Ciniflo web spun around a hole in a fence post. I am now convinced of a strong environmental association between E.erythropus and C.similis along the same lines as that between the genus Ciniflo and Oonops pulcher Temp.
