

**MULTIDISCIPLINARY APPROACHES  
TO CONFLICT AND  
APPEASEMENT IN ANIMALS AND MAN**

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A COMPARATIVE STUDY OF THE AGGRESSIVE BEHAVIOUR OF TWO SPECIES OF MYRMICINES (FORMICIDES).

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The respective aggressive behaviour of Myrmica laevinodis (polygynous species) and Myrmica ruginodis (monogynous species) as shown when the ants defend their nest against intruders of an alien species, are socially different :

- The average level of group aggressivity is higher in Myrmica ruginodis than in Myrmica laevinodis.
- Interindividual variability is very marked in M. ruginodis and is less pronounced in M. laevinodis.
- The possibility for social regulation is low in M. ruginodis but real in M. laevinodis.

These different characteristics are in harmony with the degree of openness of both societies. Moreover aggressivity increases violently when sensory privation (by antennectomy) occurs. It even appears amongst individuals of the same species and especially in M. ruginodis. The level of aggressivity changes during the year. This is particularly true for M. ruginodis whose aggressivity is modulated by the presence of operated or intact congeners.

These results enabled us to specify the behaviour of both species. Behaviour patterns were highly variable among individuals of each species but were, however, more stable in Myrmica ruginodis.