Grey Wagtail's comparative trophic menu strategy during the nuptial and inter-nuptial periods in the western Babors region (Bejaia, Algeria)

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The trophic menu of the Grey Wagtail (Motacilla cinerea) was revealed by analysing 180 faeces collected during an annual cycle in the Western Babors region (Bejaia). A total of 1534 food items were counted, they belong to 155 prey taxa which are divided into 4 classes; Gastropods, Arachnids, Crustacea and Insects. The examination of the food spectrum of this bird shows a great diversity in the choice and consumption of prey available in the environment. Insects remain the most favoured prey (Fc 85.85%). They form the basis of the diet of this insectivore, followed by arachnids (13.10%), crustaceans (0.84%) and gastropods (0.19%). The trophic niche of this species seems to be diversified and balanced with little variation within seasons. The comparative study between the diet of this species during the nuptial period, which extends from February 2010 to July 2010, and its diet during the internuptial period, which extends from August 2010 to January 2011, corresponds to the analysis of 90 faeces for each period. The hunting effort seems to be focused on Araneae sp2 during the breeding period, but during the inter-breeding period Baetidae sp1 is found to be the most targeted taxon-prey. This may indicate the ease of capture and abundance of these prey during the periods considered during the year. The analysis of variance test (A.N.O.V.A.), confirms that there is no significant difference between these two periods (F = 0.18, P = 0.66; ddl = 1), which means that this species takes its food in the same way during these two periods in terms of average wealth. In general, this species is characterised by an opportunistic feeding behaviour of the generalist type that allows them to adapt to variations in environmental conditions.

Key words: Motacilla cinerea, Diet, nuptial and inter-nuptial period, Kabylie of Babors.