Enhancing avifauna in commercial plantations: Research note

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The occurrence of fauna in commercial plantations is often associated with structural complexity. Through a meta-analysis, we tested whether the structural complexity of plantations could enhance bird species assemblages and whether bird assemblages respond differently depending on taxonomic affiliation, body size, and diet. Our analyses included 167 case studies in 31 countries in which bird assemblages in forests and plantations were compared and 42 case studies in 14 countries in which bird assemblages in plantations of different structural complexity were compared. Species richness, but not abundance, was higher in forests than in plantations. Both species richness and abundance were significantly higher in complex than in structurally simple plantations. Taxonomic representation and body size did not differ between forest and plantations, except that there were fewer insectivorous birds in plantations than in forests. In the comparison of simple versus complex plantations, abundan