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Distribution of sulfamonomethoxine and trimethoprim in egg yolk and white

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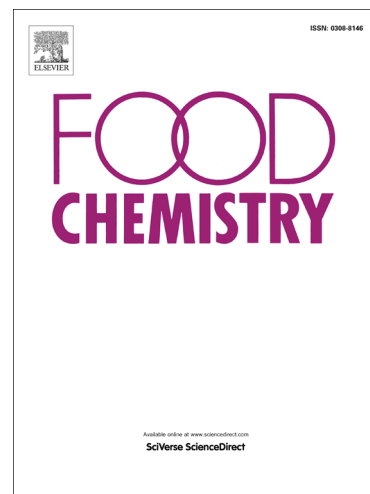
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11 **ABSTRACT**

12 The distribution of sulfamonomethoxine (SMM) and trimethoprim (TMP) in egg yolk and
13 white was measured during and after administration of a SMM/TMP combination in laying
14 hens in doses of 8 g l⁻¹ and 12 g l⁻¹ in drinking water for 7 days. The SMM concentration
15 reached maximal levels on day 2 of the post-treatment period for both doses (µg kg⁻¹): 5920
16 and 9453 in yolk; 4831 and 6050 in white, in doses 1 and 2, respectively. Significant
17 differences in the SMM and TMP concentrations between yolk and white in post treatment
18 period were found. SMM dropped below the LOD (1.9 µg kg⁻¹) in yolk after day 16 and 19
19 for doses 1 and 2. TMP reached maximal levels on day 3 after drug administration for doses 1
20 and 2 (µg kg⁻¹): 6521 and 7329 in yolk, 1370 and 1539 in white. TMP residues were measured
21 above LOD (0.3 µg kg⁻¹) in yolk for both doses on day 37 post-treatment.

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23 *Key words:* Sulfamonomethoxine; Trimethoprim; Elimination; Laying hens; Egg; Yolk;
24 White; LC-MS/MS

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