

**Table 2 Recommended revised microbiological guidelines for treated wastewater use in agriculture [17]<sup>a</sup>**

<b>Category/reuse conditions</b>	<b>Exposed group</b>	<b>Irrigation technique</b>	<b>Intestinal nematodes<sup>b</sup> (arithmetic mean no. of eggs/L<sup>c</sup>)</b>	<b>Faecal coliforms (geometric mean no./100 mL<sup>c</sup>)</b>	<b>Wastewater treatment expected to achieve required microbiological quality</b>
<i>A. Unrestricted irrigation</i>					
For vegetable and salad crops eaten uncooked, sports fields, public parks <sup>d</sup>	Workers, consumers, the public	Any	< detection	10 <sup>3</sup> □	Waste stabilization ponds with a retention time of 21 days or secondary treatment followed by equivalent storage or slow sand filtration or equivalent
<i>B. Restricted irrigation</i>					
Cereal crops, industrial crops, fodder crops, pasture and trees <sup>e</sup>	Workers, nearby communities	Spray or sprinkler	< detection	10 <sup>5</sup> □	As for category A
		Flood/furrow	< detection	10 <sup>3</sup> □ <sup>f</sup>	As for category A
<i>C. Localized irrigation of crops in category B if exposure of workers and the public does not occur</i>	None	Trickle, drip or bubbler	Not applicable	Not applicable	Pre-treatment as required by the irrigation technology, but not less than primary sedimentation

<sup>a</sup>In specific cases, local epidemiological, sociocultural and environmental factors should be taken into account and the guidelines modified accordingly.

<sup>b</sup>For *Ascaris* and *Trichuris* species and hookworms, the guideline limit is also intended to protect against risks from parasitic protozoa.

<sup>c</sup>Guideline values are given for design purposes. They should be achieved during the planning and design stages for effluent reuse projects, and not used as a standard specification for monitoring effluent quality and sample collection.

<sup>d</sup>A more stringent guideline limit (≤ 200 faecal coliforms/100 mL) is appropriate for public lawns, such as hotel lawns, with which the public may come into direct contact.

<sup>e</sup>In the case of fruit trees, irrigation should stop 2 weeks before the fruit is picked, and no fruit should be picked off the ground. Spray/sprinkler irrigation should not be used.

<sup>f</sup>In cases where the treatment method fails to achieve the guideline limit, use faecal coliforms < 10<sup>5</sup>, provided that precautions are taken such as protective clothes, crop restriction and providing a buffer zone between the irrigated area and nearby communities.