# Resistance management recommendations and proposals for Fungicides not included in current working groups

<table>
<thead>
<tr>
<th>Compound</th>
<th>Fluazinam</th>
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<tbody>
<tr>
<td>Chemistry</td>
<td>2,6-dinitro-aniline</td>
</tr>
<tr>
<td>FRAC MoA Code</td>
<td>29</td>
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<tr>
<td>TARGET SITE AND CODE</td>
<td>C5: uncouplers of oxidative phosphorylation</td>
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</tbody>
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**Uses**
- Foliar application: *Phytophthora infestans* on potato and tomato; *Sclerotinia* spp. on potato, beans, peanut, wheat, cotton, soybean, carrots; *Botrytis* spp. on beans, grapes, onion and ornamentals; *Venturia inaequalis* on pome fruit, *Colletotrichum* spp. on beans, berries, apples & turf; *Clariireedia* spp.; *Rhizoctonia* solani; *Microdochium nivale*; *Drechslera* spp. on turf;
- Soil application: *Phytophthora infestans* on potato; *Plasmodiophora brassicae* on Brassica crops

**Resistance Status**
- The resistance risk is considered low
  - Field resistance has been claimed in *Botrytis* in Japan (beans).
  - Reduced sensitivity of *Phytophthora infestans* has been detected in a clonal lineage (EU: 37) in various European countries.

**Resistance Mechanism**
- Unknown

**Recommendations**

**General Recommendations**
- The use of fluazinam is recommended in the context of a spray program considering an anti-resistance strategy in which other different fungicide classes are included in the program.
- Apply fluazinam preventatively.
- Apply fluazinam in rotation or in mixture with fungicides from a different cross-resistance group with satisfactory efficacy against the target pathogens.
- When targeting high risk pathogens or areas where reduced sensitivity of target pathogens has been documented: (i) Apply fluazinam in mixture whenever possible. (ii) If used solo, strict rotation is required with fungicides from a different cross-resistance group. (iii) Limit the number of fluazinam applications to max. 50% of the total applications in a cropping season irrespective of the target disease.
- Soil applications of fluazinam should be considered as part of the total number of allowed applications if it provides activity against foliar pathogens.

**Recommendations for potato (late blight)**
- Apply fluazinam preventatively.
- Maximum of six applications.
- In regions with reported resistance it is recommended to limit the number of fluazinam applications to max. 50% of all applications and use mixtures with fungicides belonging to other modes of action that provide satisfactory efficacy against *Phytophthora infestans*.
- No more than 3 sequential applications of fluazinam. In regions with resistance or reduced sensitivity apply a maximum of 2 sequential applications if product is used solo.
- Refer to manufacturer’s recommendations for rates and intervals.

**Requested by / date**
Helge Sierotzki Stefano Torriani, Ana Dutton, Syngenta Crop Protection.
S Araki, ISK
18th June 2020

**FRAC SC approval / date**