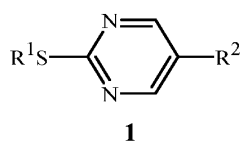


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CLAIMS

What is claimed is:

1. A method for preparing a compound of Formula 1

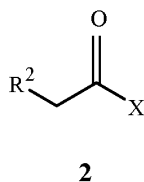


wherein

R¹ is C₁–C₄ alkyl; and

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl;

the method comprising treating a compound of Formula 2

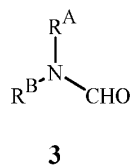


wherein

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl; and

X is Cl or OH

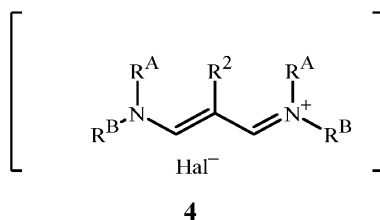
in the presence of a halogenating agent and a compound of Formula 3



wherein

R^A and R^B are each independently C₁–C₄ alkyl; or

R^A and R^B are taken together to be –(CH₂)₄–, –(CH₂)₅– or –CH₂CH₂OCH₂CH₂– to provide an intermediate of Formula 4



wherein

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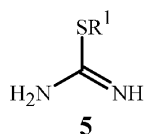
R^2 is halogen, C_1-C_4 alkyl or C_1-C_4 haloalkyl; and

R^A and R^B are each independently C_1-C_4 alkyl; or

R^A and R^B are taken together to be $-(CH_2)_4-$, $-(CH_2)_5-$ or $-CH_2CH_2OCH_2CH_2-$; and

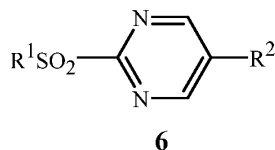
Hal^- is chloride ion or bromide ion; and

treating the intermediate of Formula 4 in the presence of a base with an acid salt of a compound of Formula 5



wherein R^1 is C_1-C_4 alkyl.

2. The method of Claim 1 wherein R^1 is C_1-C_2 alkyl; and each R^A and R^B is methyl.
3. The method of Claim 2 wherein R^1 is methyl and R^2 is halogen.
4. The method of Claim 3 wherein R^2 is chlorine.
5. The method of Claim 1 wherein X is Cl.
6. The method of Claim 1 further comprising preparing a compound of Formula 6



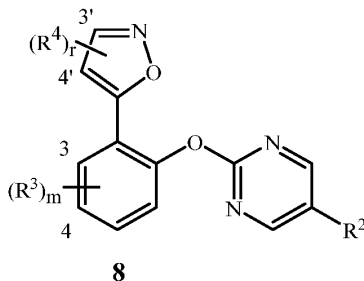
wherein

R^1 is C_1-C_4 alkyl; and

R^2 is halogen, C_1-C_4 alkyl or C_1-C_4 haloalkyl

by treating a compound of Formula 1 with an oxidant.

7. The method of Claim 6 further comprising preparing a compound of Formula 8



wherein

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R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl;

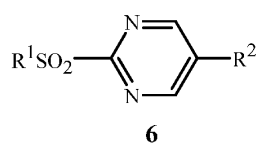
each R³ is independently halogen, cyano, amino, C₁–C₄ alkyl, C₂–C₄ alkenyl, C₂–C₄ alkynyl, C₁–C₄ alkoxy, C₂–C₄ alkoxycarbonyl, C₂–C₄ alkylcarbonyloxy, C₂–C₄ alkoxyalkyl or C₁–C₄ haloalkyl;

each R⁴ is independently halogen, cyano, C₁–C₄ alkyl, C₁–C₄ alkoxy, C₁–C₄ haloalkyl, C₁–C₄ haloalkoxy or SCF₃;

m is 0, 1, 2 or 3; and

r is 0, 1 or 2;

by treating the compound of Formula 6

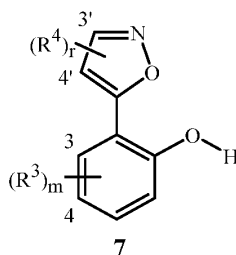


wherein

R¹ is C₁–C₄ alkyl; and

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl

in the presence of a second base with a compound of Formula 7



wherein

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl;

each R³ is independently halogen, cyano, amino, C₁–C₄ alkyl, C₂–C₄ alkenyl, C₂–C₄ alkynyl, C₁–C₄ alkoxy, C₂–C₄ alkoxycarbonyl, C₂–C₄ alkylcarbonyloxy, C₂–C₄ alkoxyalkyl or C₁–C₄ haloalkyl;

each R⁴ is independently halogen, cyano, C₁–C₄ alkyl, C₁–C₄ alkoxy, C₁–C₄ haloalkyl, C₁–C₄ haloalkoxy or SCF₃;

m is 0, 1, 2 or 3; and

r is 0, 1 or 2.

8. The method of Claim 7 wherein

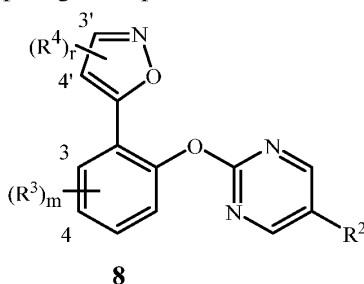
m is 0 or 1;

r is 0 or 1;

R² is halogen;

R³ is halogen, cyano, C₁–C₄ alkyl or C₁–C₄ haloalkyl, wherein when m is 1, R³ is attached to the remainder of Formula 7 and Formula 8 at the 3-position; and R⁴ is C₁–C₄ haloalkyl, wherein when r is 1, R⁴ is substituted on the remainder of Q at the 3'-position.

9. The method of Claim 8 wherein R² and R³ are both chlorine.
10. The method of Claim 8 wherein R⁴ is C₁ fluoroalkyl.
11. The method of Claim 7 wherein the compound of Formula 8 is selected from the group consisting of
 - 2-[2-(3-bromo-5-isoxazolyl)phenoxy]-5-chloropyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]phenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]phenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine and
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-bromophenoxy]pyrimidine.
12. The method of Claim 11 wherein the compound of Formula 8 is 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine.
13. A method for preparing a compound of Formula 8,



wherein

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl;

each R³ is independently halogen, cyano, amino, C₁–C₄ alkyl, C₂–C₄ alkenyl, C₂–C₄ alkynyl, C₁–C₄ alkoxy, C₂–C₄ alkoxycarbonyl, C₂–C₄ alkylcarbonyloxy, C₂–C₄ alkoxyalkyl or C₁–C₄ haloalkyl;

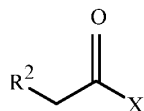
each R⁴ is independently halogen, cyano, C₁–C₄ alkyl, C₁–C₄ alkoxy, C₁–C₄ haloalkyl, C₁–C₄ haloalkoxy or SCF₃;

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m is 0, 1, 2 or 3; and

r is 0, 1 or 2;

comprising treating a compound of Formula 2

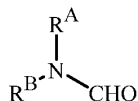
**2**

wherein

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl; and

X is Cl or OH

in the presence of a halogenating agent and a compound of Formula 3

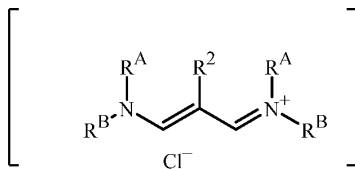
**3**

wherein

R^A and R^B are each independently C₁–C₄ alkyl; or

R^A and R^B are taken together to be –(CH₂)₄–, –(CH₂)₅– or –CH₂CH₂OCH₂CH₂–

to provide an intermediate of Formula 4

**4**

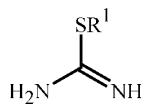
wherein

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl; and

R^A and R^B are each independently C₁–C₄ alkyl; or

R^A and R^B are taken together to be –(CH₂)₄–, –(CH₂)₅– or –CH₂CH₂OCH₂CH₂–;

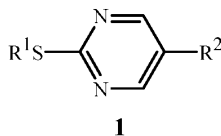
treating the intermediate of Formula 4 with an acid salt of a compound of Formula 5

**5**

wherein R¹ is C₁–C₄ alkyl;

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in the presence of a base to prepare a compound of Formula 1

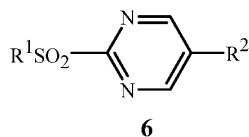


wherein

R¹ is C₁–C₄ alkyl;

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl;

treating the compound of Formula 1 with an oxidant to provide a compound of Formula 6

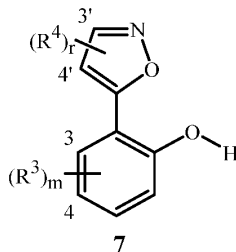


wherein

R¹ is C₁–C₄ alkyl; and

R² is halogen, C₁–C₄ alkyl or C₁–C₄ haloalkyl; and

treating the compound of Formula 6 in the presence of a second base with a compound of Formula 7



wherein

each R³ is independently halogen, cyano, amino, C₁–C₄ alkyl, C₂–C₄ alkenyl, C₂–C₄ alkynyl, C₁–C₄ alkoxy, C₂–C₄ alkoxycarbonyl, C₂–C₄ alkylcarbonyloxy, C₂–C₄ alkoxyalkyl or C₁–C₄ haloalkyl;

each R⁴ is independently halogen, cyano, C₁–C₄ alkyl, C₁–C₄ alkoxy, C₁–C₄ haloalkyl, C₁–C₄ haloalkoxy or SCF₃;

m is 0, 1, 2 or 3; and

r is 0, 1 or 2.

14. The method of Claim 13 wherein

R¹ is C₁–C₂ alkyl; and

each R^A and R^B is methyl.

15. The method of Claim 14 wherein R^1 is methyl and R^2 is halogen.
16. The method of Claim 13 wherein
 - m is 0 or 1;
 - r is 0 or 1;
 - R^2 is halogen;
 - R^3 is halogen, cyano, C_1-C_4 alkyl or C_1-C_4 haloalkyl, wherein when m is 1, R^3 is attached to the remainder of Formula 7 and Formula 8 at the 3-position; and
 - R^4 is C_1-C_4 haloalkyl; wherein when r is 1, R^4 is at the 3'-position.
17. The method of Claim 16 wherein R^2 and R^3 are both chlorine.
18. The method of Claim 16 wherein R^4 is C_1 fluoroalkyl.
19. The method of Claim 13 wherein the compound of Formula 8 is selected from the group consisting of
 - 2-[2-(3-bromo-5-isoxazolyl)phenoxy]-5-chloropyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]phenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]phenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-fluorophenoxy]pyrimidine,
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine,
 - 5-bromo-2-[2-[3-(trifluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine and
 - 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-bromophenoxy]pyrimidine.
20. The method of Claim 19 wherein the compound of Formula 8 is 5-chloro-2-[2-[3-(difluoromethyl)-5-isoxazolyl]-3-chlorophenoxy]pyrimidine.