

Key to Female Bumble Bees

If the thorax is:
all yellow

OR
yellow with a black spot

START For females, look at thorax and choose arrow A, B, or C

then look at abdominal segments 1 and 2

1 entirely yellow

2 segment 1 yellow; segment 2 brownish or yellow arch
common less common

3 segment 1 yellow; segment 2 yellow-lobed pattern

4 segment 1 yellow; segment 2 black

5 segments 1 and 2 black

6 segment 1 yellow; segment 2 brownish centrally

- black hair on top of head
- queens normal size (large)
- segment 2 often brownish
- hair short, dense
- space between bottom of eye and mandible is short; (shorter than wide)

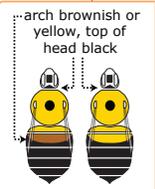


B. affinis ★

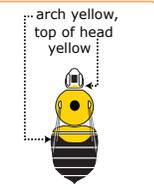
- yellow hair on top of head
- queens small (size of large workers of other species)
- segment 2 yellow
- hair longish and shaggy
- space between eye and mandible is long (as long as or longer than wide)



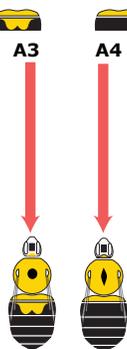
B. vagans ★



B. griseocollis ★



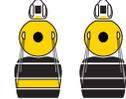
B. bimaculatus ★



B. bimaculatus ★ *B. impatiens* ★

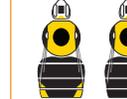
Cuckoo Bumble Bees

- side of thorax yellow
- abdomen often yellow on segment 3
- thoracic spot small or absent



B. citrinus ★
Absent from MO

- side of thorax black
- abdomen usually all black
- thoracic spot large



B. variabilis ★

A6

If the thorax is:
yellow with a distinct black band between the wing bases

then look at the whole abdomen

1 first 4 segments are yellow

2 2nd segment with brown internally, otherwise yellow

3 segments 1 and 2 yellow, rest black

4 all black go to A5

5 2nd and 3rd segments yellow, 1st segment yellow or black, rest black

If the thorax has:
yellow collar (anterior thorax) and rest is all black or a mix of yellow and black nearest the abdomen (posterior thorax)

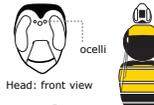
then either

- a
- abdominal segment 1 usually all black
 - top of head with yellow stripe
 - posterior thorax often with yellow but varies from all black to all yellow
 - side view of head fatter at the middle
 - small eyes (ocelli; 3 circles) lower on face



B. auricomus ★

- b
- abdominal segment 1 usually with some yellow, especially in the center
 - the top of the head all black
 - posterior thorax usually black but varies from all black to mostly yellow
 - side view of head fatter at the top
 - small eyes (ocelli) higher on face



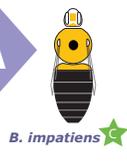
B. pennsylvanicus ★

Key to Male Bumble Bees

START For males, start by looking at the abdomen and choose which purple arrow (A-E) best describes it.

If 1st segment is yellow, and the rest are black.....

A



B. impatiens ★

If 1st 2 segments have some color, and the rest are black.....

B



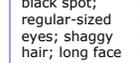
B. bimaculatus ★

1 segment 1 yellow; segment 2 with yellow-lobed pattern



B. griseocollis ★

2 segment 1 yellow; segment 2 with brownish or yellow arch; large eyes



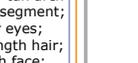
B. vagans ★

3 without any black



B. fraternus ★

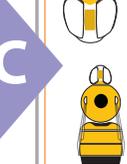
black band or large spot on thorax; tan arch in 2nd segment; regular eyes; mid-length hair; shortish face;



B. affinis ★

If 1st 3 abdominal segments are yellow, rest black

C



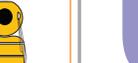
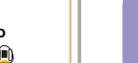
B. auricomus ★

large eyes; hair short and even



B. citrinus ★
Absent from MO

regular-sized eyes; hair shaggier



CUCKOO

If abdomen has repeated black and yellow striping or is all black

D



B. bimaculatus ★

thorax all yellow or with a small black spot; yellow on segment 2 with a lobed pattern; side of thorax yellow



B. variabilis ★ CUCKOO

- ★ = common
- ☆ = occasional
- ★ = rare
- ★ = very rare

If mostly yellow, 4 to all segments yellow, rest black.....

E

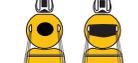


posterior thorax has a mix of black and yellow hairs; sides of thorax black



B. pennsylvanicus ★

thorax yellow with a spot OR a black band and sides of thorax mostly yellow



B. pennsylvanicus ★

black on thorax a band



B. ferrivagus ★

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