

TABLE 2. OCCURRENCE OF *I. HUMILIS* AND FIVE COMMON NATIVE ANT SPECIES AT 12 SITES IN YOLO AND SOLANO COUNTIES*

Native ant species	Site [†]											
	4	5	8	9	11	15	16	19	21	23	33	41
<i>Iridomyrmex humilis</i> , sample 1	-	+	-	+	-	+	+	-	-	-	-	-
sample 2	-	+	-	+	-	+	+	-	+	-	-	-
<i>Tapinoma sessile</i> , sample 1	+	-	+	-	+	-	-	+	-	-	+	+
sample 2	+	-	+	-	+	-	-	+	-	-	+	+
<i>Liometopum occidentale</i> , sample 1	+	-	+	-	+	-	-	+	+	+	-	+
sample 2	+	-	+	-	+	-	-	+	-	+	+	+
<i>Prenolepis imparis</i> , sample 1	-	+	+	+	+	+	-	+	+	+	+	+
sample 2	+	+	+	+	+	+	-	+	+	+	+	+
<i>Formica occidua</i> , sample 1	+	-	+	-	+	-	-	+	+	+	+	-
sample 2	+	-	+	-	+	-	-	+	+	-	+	+
<i>Stenamma diecki</i> , sample 1	-	+	-	-	+	-	-	+	+	+	+	+
sample 2	-	+	+	-	+	-	-	+	-	+	+	+

*Sample 1 was taken during the original survey of the sites in 1984-85; sample 2 involved the application of identical sampling procedures to the same sites in 1986.

[†]Presence is indicated by plus (+) sign; absence is indicated by minus (-) sign.

sources of water. Small tracts of riparian woodland traversed by seasonally intermittent streams were not found to be colonized by *I. humilis*, with the exception of one disturbed site in Davis (site 12), adjacent to a building complex with irrigated landscaping. The aversion of *I. humilis* to summer-dry riparian sites is demonstrated by its distribution along Putah Creek (fig. 3). A section of this creek near Davis has been diverted from its original course, leaving fragments of riparian woodland (e.g., sites 11 and 13) without permanently flowing water. *Iridomyrmex humilis* has not occupied these areas, despite adjacent populations in urban Davis and along the current course of the creek.

(2) There is a suggestion from the data in table 3 that riparian sites with *I. humilis* populations are more likely to be close to urban areas. The difference in distances between the two kinds of sites approaches statistical significance (Mann-Whitney U-test, $p \approx 0.080$).

(3) Valley riparian sites occupied by *I. humilis* tend to be environmentally degraded. There is more frequent encroachment by nonnative trees (6 out of 10 *I. humilis* sites; 2 out of 12 other sites; G-test, $p < .05$), and the mean estimated overall disturbance is greater for *I. humilis* sites (t-test, $p \approx 0.046$).

Distribution of *I. humilis*

Iridomyrmex humilis was found in remnant riparian woodland along four stream systems: Ulatis Creek, Putah Creek, Cache Creek, and the Sacramento River. Spot checks elsewhere in Yolo and Solano counties confirmed that populations of this species are also widespread in urban and agricultural locations (fig. 3).

Extensive spot sampling was also used to examine the microgeographic distribution of *I. humilis* along the four principal corridors of riparian woodland. The results