

## 12. *Epilachna defecta*. (Tab. XIII. figg. 9, 10, 11.)

*Epilachna defecta*, Muls. Spec. Col. Trim. sécur. p. 733<sup>1</sup>; Crotch, Rev. Coccin. p. 61<sup>2</sup>.

*Epilachna fuscipes*, Muls. Spec. Col. Trim. sécur. p. 735<sup>3</sup>.

*Hab.* MEXICO<sup>1 2 3</sup>, Alvarez Mountains (*Dr. Palmer*), Tampico in Tamaulipas (*Richardson*), Orizaba, Coscomatepec, Oaxaca, Yolos, Juquila, Chiapas (*Sallé*), Omilteme in Guerrero, Atoyac in Vera Cruz (*H. H. Smith*), Misantla (*F. D. G.*), Jalapa, Tapachula in Chiapas (*Höge*), Teapa in Tabasco (*Höge & H. H. Smith*); GUATEMALA (*Sallé*), Chinautla and Aceituno (*Salvin*), Panima, Purula, Teleman, and San Juan, all in Vera Paz, Dueñas Capetillo (*Champion*); HONDURAS (*Sallé*); NICARAGUA, Chontales (*Janson, Belt*); COSTA RICA (*Van Patten*), Volcan de Irazu (*Rogers*); PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).—COLOMBIA<sup>1 2 3</sup>.

Very abundant from Southern Mexico to Colombia. The variety named *fuscipes* has the head and thorax more or less red or yellow, and in these lighter-coloured forms the body and legs are also red or pitchy-red. Usually *E. defecta* has the femora spotted beneath or entirely pitchy-black, and the tibiæ and tarsi red. An entirely black variety occurs with only the tibiæ and tarsi and tips of the femora, and the mouth and trophi, orange-yellow. Examples of this form, with intermediate ones having only the two basal yellow spots, occurred at Tapachula in Chiapas, at Capetillo, and in Costa Rica.

We figure three examples: fig. 9, a fairly typical form from Capetillo; fig. 10, a variety from Tapachula; fig. 11, the var. *fuscipes*, Muls., from Vera Cruz.

According to *Sallé*<sup>2</sup>, it lives upon *Solanum nigrum*.

## 13. *Epilachna borealis*. (Tab. XIII. figg. 12–16.)

*Coccinella borealis*, Fabr. Syst. Ent. p. 82 (1775)<sup>1</sup>; Syst. Eleuth. i. p. 368<sup>2</sup>; Mant. i. p. 58<sup>3</sup>; Oliv. Ent. vi. p. 1021, t. 3. fig. 27<sup>4</sup>.

*Epilachna borealis*, Muls. Spec. Col. Trim. sécur. p. 826<sup>5</sup>; Crotch, Rev. Coccin. p. 64<sup>6</sup>.

*Coccinella immaculicollis*, Chevr. Col. Mex., Cent. i. fasc. 3, no. 100 (Nov. 1834)<sup>7</sup>.

*Epilachna æquinotialis*, Muls. Spec. Col. Trim. sécur. p. 824<sup>8</sup>; Crotch, Rev. Coccin. p. 63<sup>9</sup>.

*Epilachna particollis*, Muls. Spec. Col. Trim. sécur. p. 810<sup>10</sup>.

*Epilachna indiscreta*, Muls. Opusc. iii. p. 107<sup>11</sup>.

*Coccinella 13-notata*, Latr. in Humb. & Bonpl. Obs. Zool. ii. p. 67, t. 34. fig. 8 (1833)<sup>12</sup>.

*Epilachna discincta*, Weise, Deutsche ent. Zeitschr. 1890, p. 21<sup>13</sup>.

*Hab.* NORTH AMERICA<sup>1 2 4 6</sup>, United States<sup>5</sup>.—MEXICO<sup>5 10</sup>, Parras in Coahuila (*Dr. Palmer*), Presidio (*Forrer*), Ventanas and Villa Lerdo in Durango, Iguala in Guerrero, Huetamo in Michoacan, Cordova, Las Vigas, Jalapa, Tapachula in Chiapas (*Höge*), Atlixco, Guanajuato, Orizaba, Texpam, San Andres Tuxtla, Catemaco, Playa Vicente, Oaxaca, Panistlahuaca (*Sallé*), Vera Cruz and Tuxpan (*Chevrolat*<sup>7</sup>), Chilpancingo, Venta de Peregrino, Xucumanatlan, and Rio Papagaio in Guerrero, Cuernavaca in Morelos, Fortin in Vera Cruz, Teapa and Frontera in Tabasco (*H. H. Smith*), Orizaba (*H. H. S. & F. D. G.*), Temax in North Yucatan (*Gaumer*);