

PIERIS RAPÆ AND AGRAULIS VANILLÆ.

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P. Rapæ, the introduced "European cabbage butterfly," on its westward march across this Continent, was first taken in Nebraska on August 3, 1881. (See CAN. ENT., 1882, 39.) In May, 1883, I took one male in Southern California. At that time I did not know its name, but I spread it and placed it in my cabinet as unknown. In a few years an Eastern Entomologist called on me, and at once identified it as P. Rapæ. It was yet other years before I saw another specimen in flight, though collecting diligently every season. About 1890 or '91 other specimens were observed, and thereafter every year brought them in rapidly increasing numbers, till now they are extremely abundant, flying early and late in the day, and early and late in the spring and fall, and at times, as in cold or cloudy weather, when only a very few of the native species can fly, indicating that it is more hardy than the native species, and that it will eventually dominate. As might be expected, the larvæ feed in good part on cabbage plants, but yet they are not at all dainty or particular as to food, and many other plants are used. Last year I raised some fine specimens from eggs laid on leaves of common nasturtiums, in the garden, and wholly fed upon those leaves.

The native Pierids, P. Protodice, P. Beckeri, and P. Sisymbri, do not oviposit on any cultivated plant so far as I know, preferring wild plants, while Rapæ apparently prefers cultivated ones. Evidently Rapæ will in a few years become a great pest. Already they fly in numbers everywhere, but especially about the Chinese vegetable gardens, and the flower gardens and dooryards of the towns.

Another introduced butterfly is that beauty from the Southern States, *Agraulis Vanillæ*. This species came into California over the Southern Pacific Railroad soon after trains ran through from Louisiana, or say in 1885. I well remember the first ones I ever saw. There were two of them in a front dooryard feeding on the flowers, and I was in a buggy driving along the street; but my net was handy, and I instantly went in pursuit of the red beauties, capturing them both as a first move, and explaining to the surprised people of the house afterward. Now *Vanillæ* is everywhere in evidence, and its larvæ are so abundant that large old passion vines are sometimes wholly denuded of leaves by them. *Vanillæ* is also extremely hardy and vigorous, flying, like Rapæ, at unfavourable times and seasons, as if bent on conquest. Still, it has not increased so rapidly during the last few years as has Rapæ.

These two species are the only ones as yet brought into the State from the East.