

THE RED CAMOMILE (PYRETHRUM ROSEUM)
FOR THE DESTRUCTION OF INSECTS.

For some years a vague report has reached us of a Caucasian plant having astonishing and eminently useful properties—that of destroying fleas and bugs; it was also known that this marvellous plant belonged to the genus *Pyrethrum*, but the specific character was uncertain. This plant has been recently introduced into Brussels, in the rich collections of the botanical garden. We hope that in some years the red camomile shall have freed our people from one of the most abominable plagues which afflict sensitive humanity. Some details of a plant of so certain a future as that the red camomile, will be, without doubt, acceptable to our readers.

In Transcausia, its country, this plant bears also the name of the *Persian camomile*, the *flea-killer*, the *flea-wort*. It forms a little shrub with perennial roots, branched twelve to fifteen inches high, bearing many flowers, at first a deep red, afterwards a clear or rosy red, and an inch and a half in diameter, (the size of the flowers will also cause this plant to be cultivated as an ornament in our gardens;) the stalks dry up after the ripening of the seeds, but the roots are perennial, and for some years may be multiplied by division. Freshly gathered, the flowers are not very odorous, but dried they acquire an odor so strong and penetrating that it kills all the insects and all the vermin, of which, until now, no certain agent of destruction has been found. The red camomile can bear 20 degrees Centigrade of frost, a temperature to which it is often submitted on the Caucasian mountains and on the plains elevated from 4,500 to 6,500 feet above the sea level. Although it inhabits virgin soil, it is easily brought into cultivation in gardens, and, since its energetic properties have been recognized, it is cultivated in a large way in different parts of southern Russia. One very remarkable fact is, that the knowledge of the secret of the manufacture of the red camomile powder for the destruction of fleas, &c., only dates back, even in Caucasia, about ten years, while the employment of this strong powder was known in regions far distant from Circassia. It seems that an Armenian merchant, named Sumbitoff, traveling in the south of Asia, observed that the inhabitants sprinkled themselves with a powder to prevent the stings of insects. This powder was nothing else than that made of the flowers of the red camomile. Returned to his country, our Armenian told his son of the discovery, and taught him to recognize the plant. The son became poor by reverses of fortune, but bethought himself of his father's secret; he set himself then to make this powder, and retired with very large profits from this trade. In 1818, he sold a pood (about twenty

kilogrammes) of camomile powder, at twenty-five rubles, (near one hundred francs;) and although the secret had been published, and every one knew the preparation of this powder, more than twenty villages in the district of Alexandropol were actually given up to the cultivation of the red camomile.—The flowering of the *Pyrethrum roseum* commences in June, and continues more than a month. The flowers are gathered in dry weather. In one day a good harvester can collect from thirty to eighty lbs. of these wild flowers. They generally dry them in the sun; but it is remarked that those dried in the shade have more virtue. The bed of flowers is stirred from time to time to help the drying. Three or four days is sufficient to drive off every trace of moisture. To obtain one pound of dried flowers it requires about one hundred pounds of fresh ones!—They are then reduced to a coarse powder with the hand, and by means of a little millstone, or a little brass mill, a very fine powder, fit for use, is obtained. We see by this that the process is very simple; the most difficult question is how to operate upon a sufficiently large number of flowering plants. To give an idea of the importance of the manufacture of this powder, we must state, that in Transcaucasia alone there are made each year for consumption in the Russian Empire, more than 40,000 kilogrammes. Baron Folkersahn has recently published a valuable paper on the cultivation of the red camomile. His memoir terminates with the following remarks:—That this powder preserves you from fleas and bugs; it kills flies, gnats, maggots, lice, and even the worms which are produced in the wounds of our domestic animals. To kill insects provided with wings, they mix a little of this with a substance that will attract them; for instance, to destroy flies, it is mixed with sugar. M. Folkersahn desires that the effects of this powder should be tried on other insects and worms hurtful to man or to his horticultural plantations.—He adds, that if experiments demonstrate the efficacy of this powder, each person could cultivate in the corner of his garden a certain number of plants of red camomile, to kill the insects, caterpillars, &c., which ravage his field. From an approximate calculation, it is found that a space of eighteen square versts furnishes a quintal of powder. Mr. B. Roetzl, who lived a long time in Russia, states that the *Insecten pulver* (powder of the *Pyrethrum*) is imported every year from Persia and the Caucasian provinces into all parts of the Russian Empire; and that, used fresh, sprinkled over the window-sills, it makes all the flies fall instantly, asphyxiating them; but that at the end of a year it loses its energy. He also states that it is the *Pyrethrum carneum* and *roseum* which produce this powder.—*Journal d' Horticulture de Belgique*.