

FRENCH NAPOLEONIC UNIFORMS: CLOTH AND DYES BY PAUL L. DAWSON

wo decades of research went into this presentation of the basic uniform colors that were used in producing French Napoleonic uniforms. A key goal was to authenticate the color Imperial Blue used on all infantry and artillery uniforms. Thanks to the assistance of the Musée de l'Emperi in Salon-de-Provence, France, and private collector Jean Brunon, we had the opportunity of handling First Empire uniforms. In 1991 Brunon passed cloth swatches to the author and described in detail what the colors and cloths were. The next challenge was to find cloth samples in other museums or institutions to provide cross-references.

The National Archives in London houses a collection of swatches from 1814 for the Dutch Army, which enabled us to verify Empress Dragoon Green, Imperial Blue, and Sky Blue. The War Department of the Dutch National Archives holds samples from 1807 of Imperial Blue, Sky Blue, and Scarlet. The Gott Collection of the Special Collections in the Brotherton Library at the University of Leeds in Great Britain possesses an unrivalled assortment of cloth and dye samples. These sources, as well as access to artifacts held by other museums and private collectors, helped us assemble this color swatch folder representing the tints and shades used in the French Army of Napoléon I.

Although we could examine actual original samples of cloth, we also had to consider the dyes used during that period in order to assess if the color we found was truly the same color as it appeared 200 years ago. Perhaps the single most important color in the French Army was Imperial Blue.

All of the blue shades of dyes were derived from indigo. Throughout history, a variety of plants have provided indigotin—a dark blue crystalline compound that is the main constituent of the dye indigo—but most natural indigo was obtained from those in the genus *Indigofera*. The primary commercial indigo species grew in Asia (*Indigofera tinctoria*, also known as *I. sumatrana*). In Central and South America, the two species grown were *I. suffruticosa* (añil) and dyer's knotweed (*Polygonum tinctorum*), although the *Indigofera* species yield more indigotin. Great Britain's blockade of France during the Revolutionary and Napoleonic Wars meant that a different

> source of indigo had to be found to produce the blue dye for French uniforms. The cost of obtaining indigo dye was why some regiments of the French army were dressed in un-dyed (white) cloth uniforms for a period in 1806 and 1807.

In Europe, the plant Woad (*Isatis tinctoria*) contains indigotin, but in a weaker concentration to indigotin derived from other plants. The color woad is known as pastel in French. In Napoleonic Europe Woad was primarily grown around Albi, Turin, and Florence.

For red colors, the Cochineal plant, Kermes oak, and Galle plant were used, and the Weld plant (Reseda) for yellows. The Reseda plant includes the variety Mignonette (*Reseda odorata*), a flowering species that was a favorite with Victorian Londoners, who planted it in their window boxes to form a perfumed barrier between their noses and the odious smells of 19th Century London streets.

A dye book printed in 1811 explained that the rose color used for facings was obtained by mixing Sumac Fustet and Cochineal to make the colors rose, nasturtium (French "capucine") and French aurore (a pale yellow orange). Clearly, rose facings on certain uniforms were not pink as some artists and re-enactors would have us believe.

The French War Ministry prescribed regulations for cloth color and cloth quality on 23 September 1807. Before the War Ministry would order the cloth, each mill/cloth supplier had to provide a sample of cloth 1 aune (119 centimeters) wide by 19 aunes (22.61 meters) long in order for the quality of the cloth and the dyed color to be checked over the entire length of the fabric. There was a list of approved contractors and set prices for cloth types and colors adhered to during the First Empire.

The colors of uniforms (and substantial modifications to the



cut of uniforms) were prescribed again with the so-called Bardin regulations of 1812. Some colors were obtained by mixing cloth fibers, notably the color beige that was made using brown and white fibers, and iron gray using blue and white fibers. Napoleon's famous riding coat is an interesting example of military fabric nomencla-

ture. Though a number of eye-witnesses to the Emperor's dress described his coat as gray, the correct 19th Century term for the fabric is beige, a mélange of brown, black and natural fibers.

Checking cloth quality was the role of Inspectors of Review and War Commissioners. Colors would vary slightly between batches of dye and mills, but overall the color of cloth was well regulated. Other factors were considered that also affect colors between mills and runs of cloth from the same mill: finish of the cloth, the selection of wool fibers, and the way in which the cloth was dyed, etc.

In addition, indigo dye is a fixed dye; it is not photosensitive, and UV radiation does not break down the dye. However, the UV will break down the cloth. This, along with dirt accumulations can change the color of the cloth and the way the cloth reflects light. The dye color does not change. The shade of blue was created by the length of time the cloth or yarn was in the vat and how old the vat of dye was. Cloth was dyed in two ways. For high quality cloth produced for officers and the Imperial Guard, the yarn was dyed to the required color before the cloth was woven. For the average soldier's uniform, the cloth was dyed after it was made and their uniforms would be a slightly different shade of blue.

There could be variances in shades of the same color based on the dyes used. Unlike mass-produced, modern dyes using machine standards to insure a consistent color, each 19th Century French mill had to produce its own dyes, and dye the cloth within an accepted tolerance to the government approved samples. For example, this author has samples of 20 different Imperial Blue cloths that are subtly different in shades, but all must have been originally produced within acceptable tolerances.

The yarn used in high-grade fabrics contained a percentage of imported Spanish Merino wool. This high-grade cloth was produced in the Elbeuf region of France. Dyeing the yarn before

> weaving gave a better quality of color, but it meant that a mill had to produce minimum quantities of cloths of different colors. The mills producing cloth that was dyed later could produce a cheaper product as the looms produced

a natural cloth, using yarn that was not as well sorted or selected as the higher-grade fabric. This coarser fabric was known as Drap de Lodeve and was the ordinary or standard army cloth.

Determining what colors are historically accurate can be more of an art than a science. Although many museums go to great lengths to accurately describe the items in their collections, mistakes do occur. For example, one museum identified a pair of white gaiters as being made from a worsted tricot. In reality they are made from linen twill. Such errors, whether by ignorance or indifference, help perpetuate arguments among uniformologists.

For this study, we do not insist that the colors presented are the only "true" colors worn by Napoleon's soldiers. However, we made a concerted effort to obtain or examine the best existing samples of First Empire uniforms and nearly all of our visual color matches were made using interior surfaces of garments, behind linings, where colors were most likely to remain consistent over the past 200 years.

SWATCH	COLOR	EXAMPLES OF USE	SOURCES
	Bleu Imperiale / Imperial Blue	Jacket cloth of the Line and Light Infantry. Infantry of the Imperial Guard, and Grenadiers à Cheval. Jackets of the Cuirassiers. Dolman of 4th Hussars. Pelisse of the 6th and 11th Hussars.	 Two samples of cloth held in the Musée de l'Emperi. War Department of Dutch National Archives, sample dated 1807.
	Bleu de Ciel / Sky Blue	Jacket cloth for trumpeters of the Imperial Guard. Facings of Carabinier regiments and saddle cloths. Dolman and Pelisse 5th Hussars. Facings and Pelisse 9th and 12th Hussars. Facings of 16th, 17th, 18th Chasseurs à Cheval.	 Sample of cloth held in the Musée de l'Emperi. National Archives, London, sample dated 1814. War Department of Dutch National Archives, sample dated 1814.
	Bleu Celeste / Celestial Blue	Facings of 5th Lancers. Dolman, pelisse and legwear of 1st and 10th Hussars. Facings of 2nd and 13th Hussars.	 Sample in the collection of Paul L. Dawson. Dolman 1st Hussars, Musée de Hussard, Tarbes, France. Hungarian breeches, 9th Hussars, Musée de l'Emperi.
	Vert Dragon / Dragoon Green (trooper)	Habits and dolmans of Dragoons, Chasseurs à Cheval, Lancers, and Hussars. Also used for leg wear of Lancers and Hussars, as well as saddle cloths and portmanteaus of Dragoons, Lancers, and Hussars.	1. Officer's habit of the Imperial Guard Empress Dragoons, Musée de l'Emperi.
	Vert Clair / Clear Green	Dolman and pelisse of Gardes d'Honneur.	1. National Archives, London, sample dated 1814.
	Vert Dragon Imperiale / Empress Dragoon Green (officer)	Habits and dolmans as well as leg wear and saddle furniture of the Empress Dragoons and Chasseurs à Cheval of the Imperial Guard.	1. Officer's habit of the Imperial Guard Empress Dragoons, Musée de l'Emperi.
	Jaune / Yellow	Collars of Voltigeurs' habits. Facings of 19th through 24th Dragoons. Dolman of trumpeter of 9th Hussars. Facings of 7th, 8th, 9th Cuirassiers.	 National Archives London, sample dated 1814. Epaulette of Imperial Guard Red Lancers, collection of Paul L. Dawson. Epaulette of Imperial Guard Voltigeur, collection of Paul L. Dawson.
	Aurore / Pale Yellow Orange	Lace decoration of regiments of the Imperial Guard, as well as the 4th, 5th, 6th Cuirassiers, 24th through 30th Dragoons, 19th, 20th, 21st Chasseurs à Cheval, and 2nd Lancers.	 Sample of lace held in the Musée de l'Emperi.
	Orange / Orange	Facings of 13th, 14th, 15th Chasseurs à Cheval.	 Color reference by uniform artist Lucien Rousselot. Gott Collection, University of Leeds, Great Britain.
	Capucine / Nasturtium	Facings of 22nd, 23rd, 24th Chasseurs à Cheval.	 Habit facings of the 22nd Chasseurs à Cheval, Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.

SWATCH	COLOR	EXAMPLES OF USE	SOURCES
	Rose / Rose	Facings of 10th, 11th, 12th Cuirassiers, 13th through 18th Dragoons, 7th, 8th, 9th Chasseurs à Cheval, and 3rd Lancers.	 Habit of dragoon, Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.
	Cramoisi / Crimson	Facings of 7th through 12th Dragoons, 10th, 11th, 12th Chasseurs à Cheval, and 4th Lancers. Facing of trumpeters of the Imperial Guard.	 Sample of cloth held in the Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.
	Ecarlate / Scarlet (officer)	Facings of officers, as per troopers.	 Habit of Imperial Guard Empress Dragoon Officer, Musée de l'Emperi.
	Ecarlate / Scarlet (other ranks)	Facings of the Imperial Guard, Line Infantry, 1st, 2nd, 3rd Cuirassiers, 1st through 6th Dragoons, 1st, 2nd, 3rd Chasseurs, 1st Lancers, and 1st, 4th, 6th, 7th, 8th, 10th, 11th, 12th Hussars. Dolman of 6th, 9th, 12th Hussars. Pelisse of 4th Hussars, and leg wear of 1st, 7th, 8th Hussars.	 War Department of Dutch National Archives, sample dated 1807. Sample of cloth held in the Musée de l'Emperi.
	Garance / Madder	Facings of 6th Lancers, and 25th, 26th, 27th Chasseurs à Cheval.	 Sample of cloth held in the Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.
	Amarante / Amaranth	Facings of Berg Lancers, and 28th, 29th, 30th Chasseurs à Cheval.	 Kurtka, Lancer of Berg, Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.
	Brun Marron / Brown	Dolman of 2nd and 13th Hussars, Equipment Train of the Line, Infirmiers (hospital attendants).	 Dolman of 2nd Hussars, Musée de l'Emperi. Gott Collection, University of Leeds, Great Britain.
	Beige / Beige	Greatcoats of Line and Light Infantry (and Napoléon).	 Sample from Christian Colmont matched to the capote of Napoléon 1er. Capote (coat) held in Musée de l'Emperi. Bonnet de Police (fatigue headwear) held in the Musée de l'Emperi.
	Gris / Gray	Leg wear of the Guard cavalry from 1813.	 Gott Collection, University of Leeds, Great Britain. Overalls, Imperial Guard Chasseur à Cheval, Musée de l'Emperi.
	Gris de Fer / Iron Gray	Jackets of Artillery and Imperial Guard and Line Equipment Train. Coats of the Imperial Guard Red Lancers. Greatcoats of the Fusiliers of the Imperial Guard.	 Sample of cloth held in the Musée de l'Emperi. Habit of Imperial Guard Artillery Train, Musée de l'Armée, Paris. National Archives, London, sample dated 1814.
	Blanc de pique Bleu / White with Blue Fleck	Cloaks and sleeved cloaks of Grenadiers à Cheval and Dragoons of the Imperial Guard. Cloaks and sleeved cloaks of Dragoons of the Line and Lancers of the Line.	 Manteau Capote (sleeved cavalry cloak) held in Musée de l'Emperi. Manteau Capote (sleeved cavalry cloak) held in Musée de l'Armée, Paris. Manteau (cavalry cloak) in Reserve collection of Borodino Battlefield Museum, Russia. Sample of cloth in collection of Paul L. Dawson.